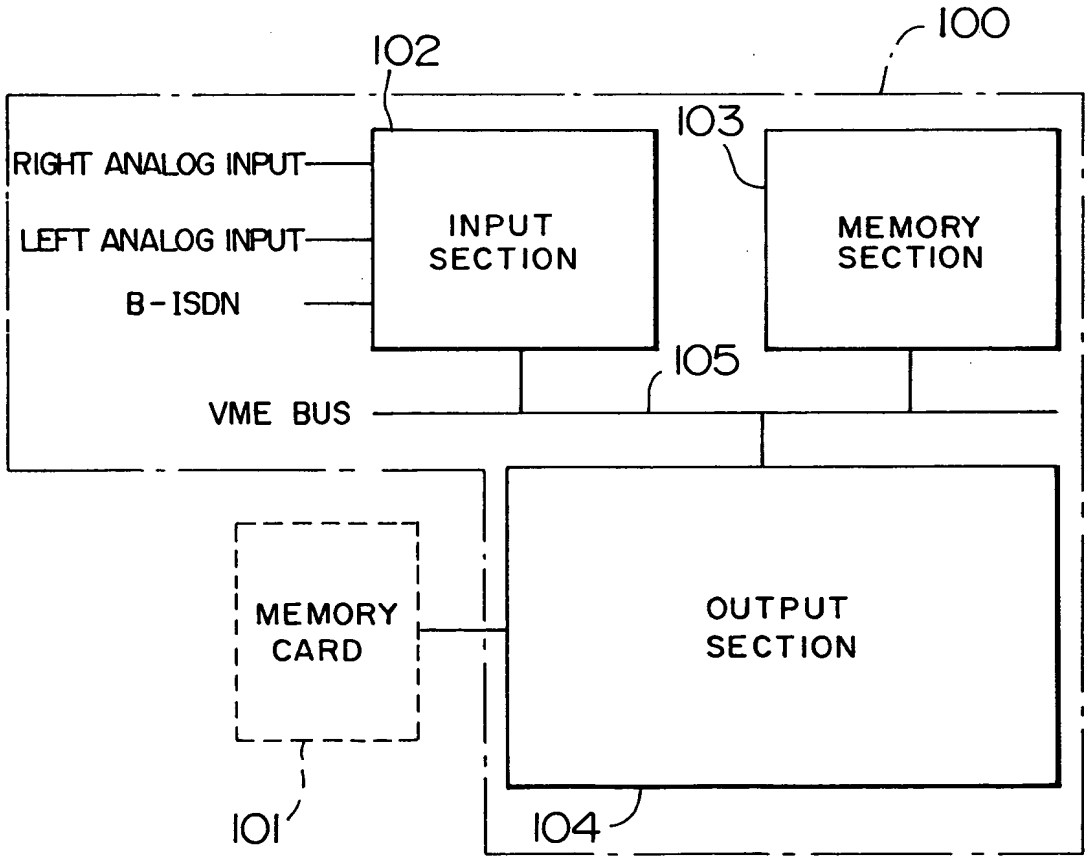
APPROVED FOR ENTRY
BY
DRAFTSMAN
CLASS | SUBCLASS

J1033 U.S. PTO
09/886268
06/22/01

FIG. 1



APPROVED O.G. FIG.
BY
DRAFTSMAN
CLASS SUBCLASS

FIG. 2

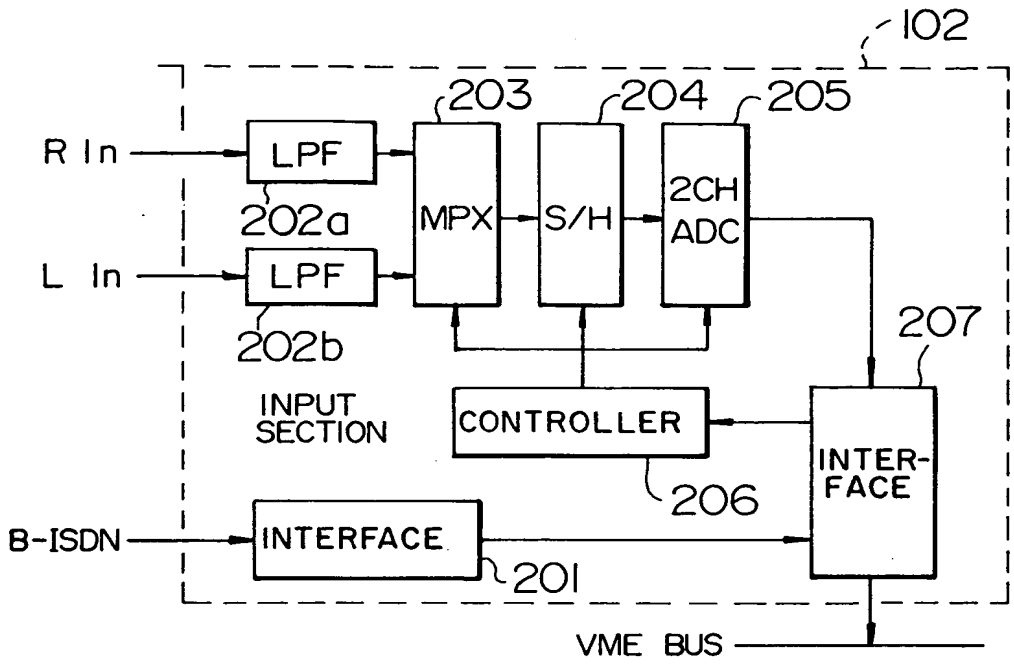
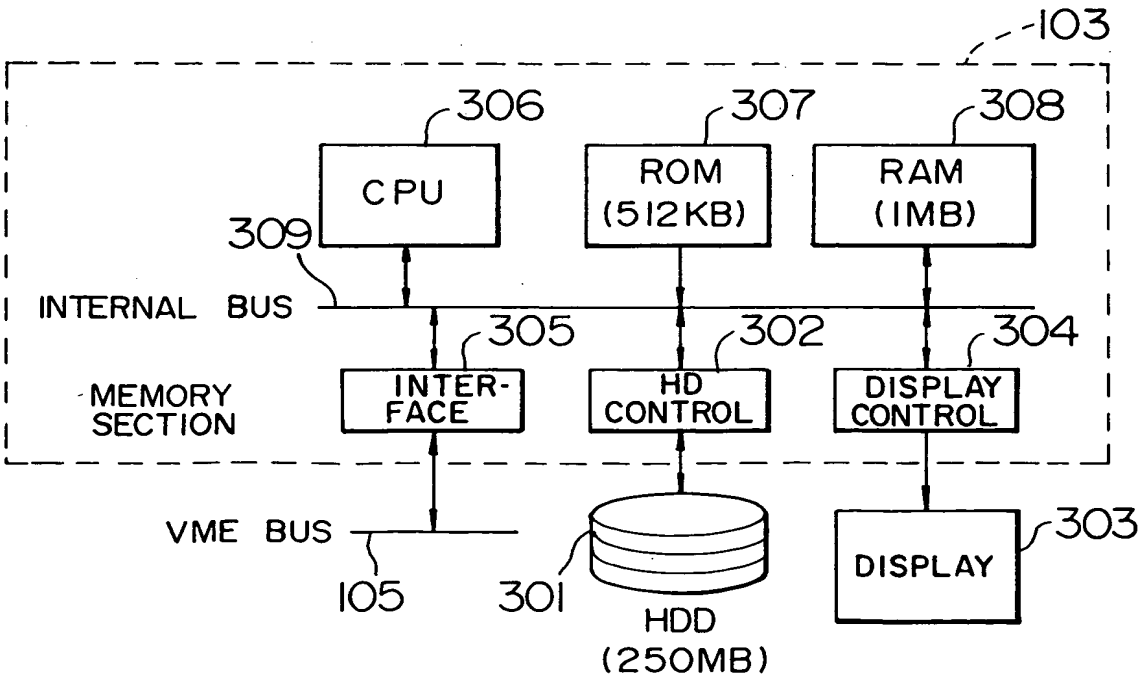
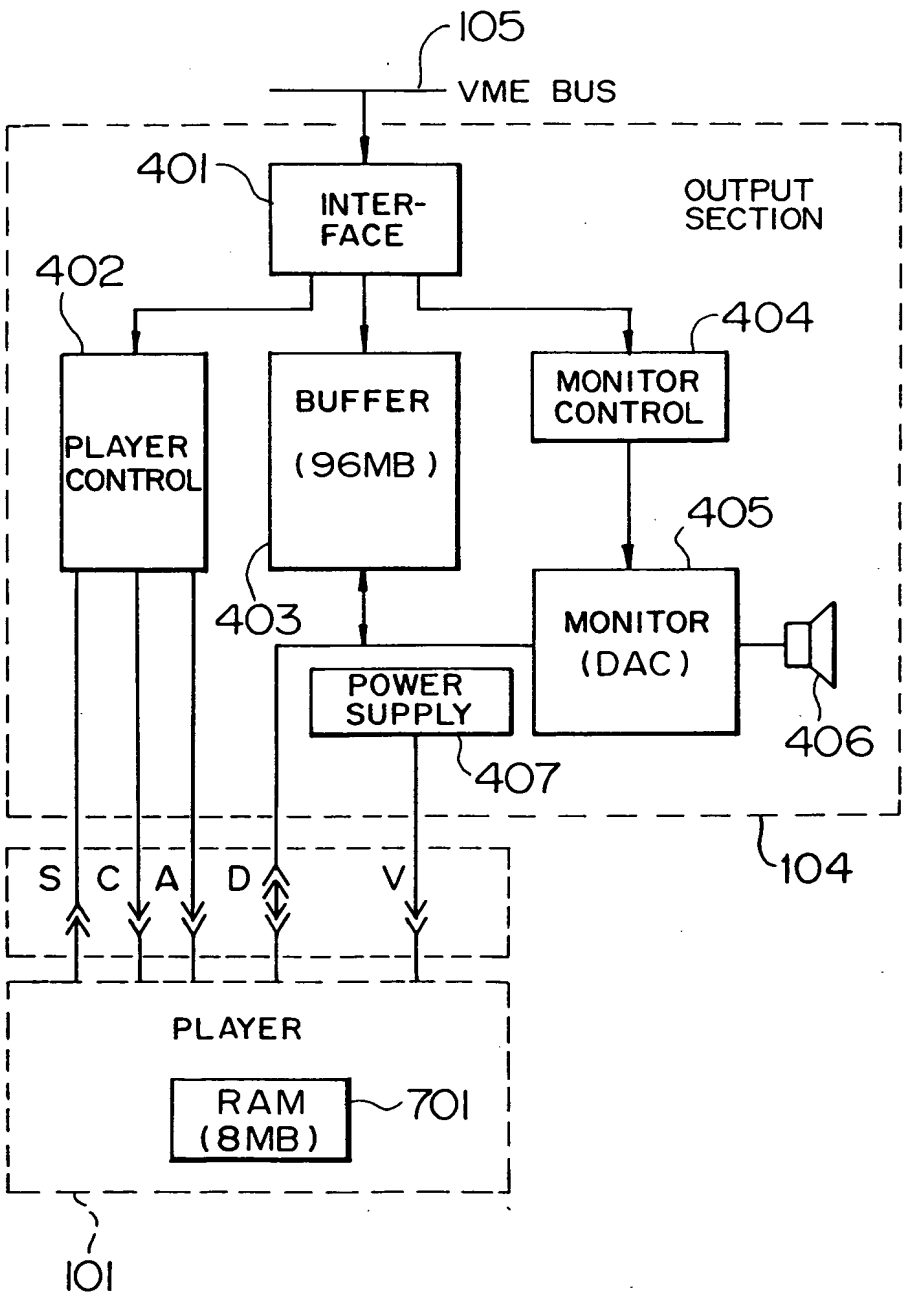



FIG. 3



APPROVED BY DRAFTSMAN
U.S. PAT.
CLASS SUBCLASS

FIG. 4



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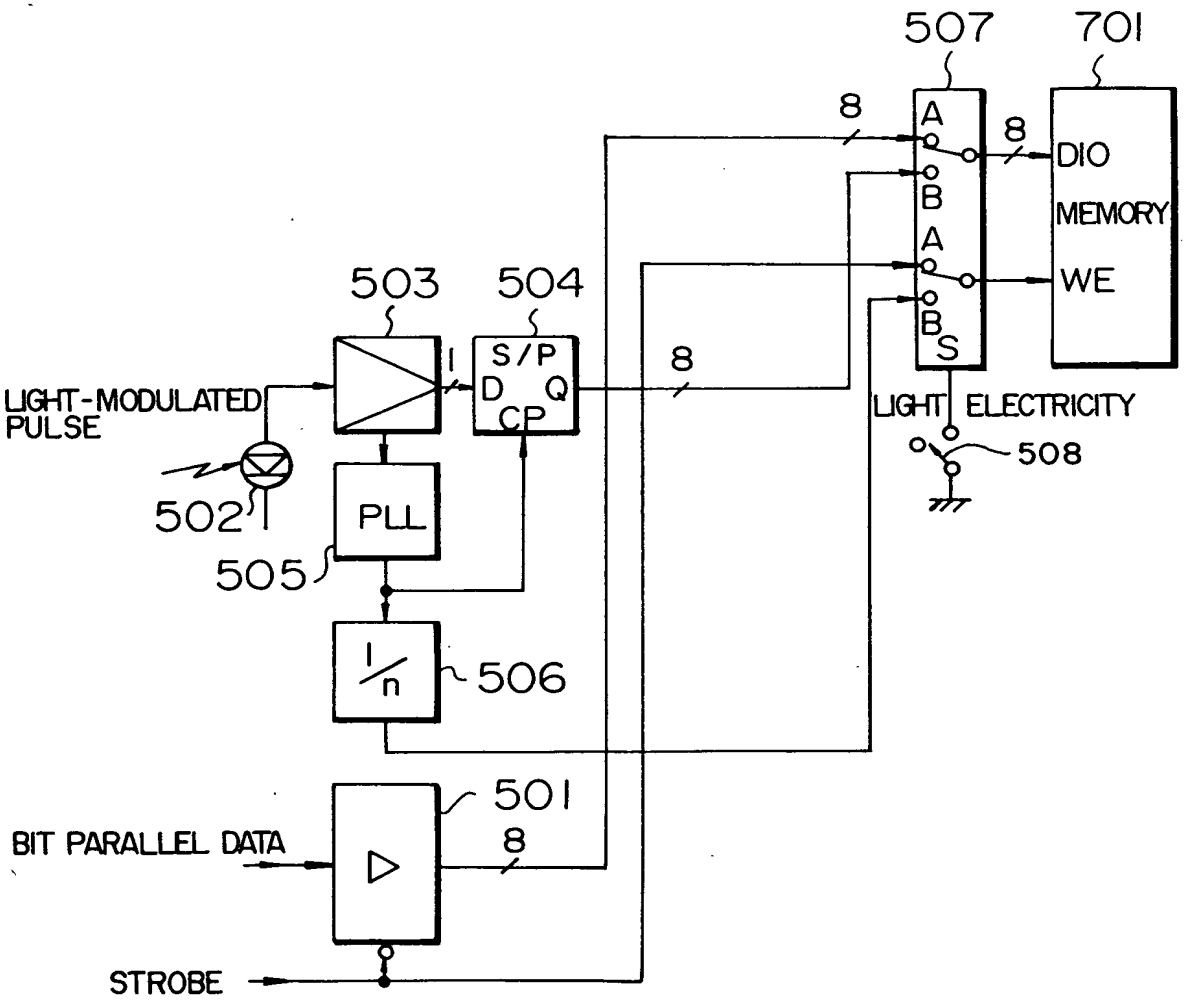
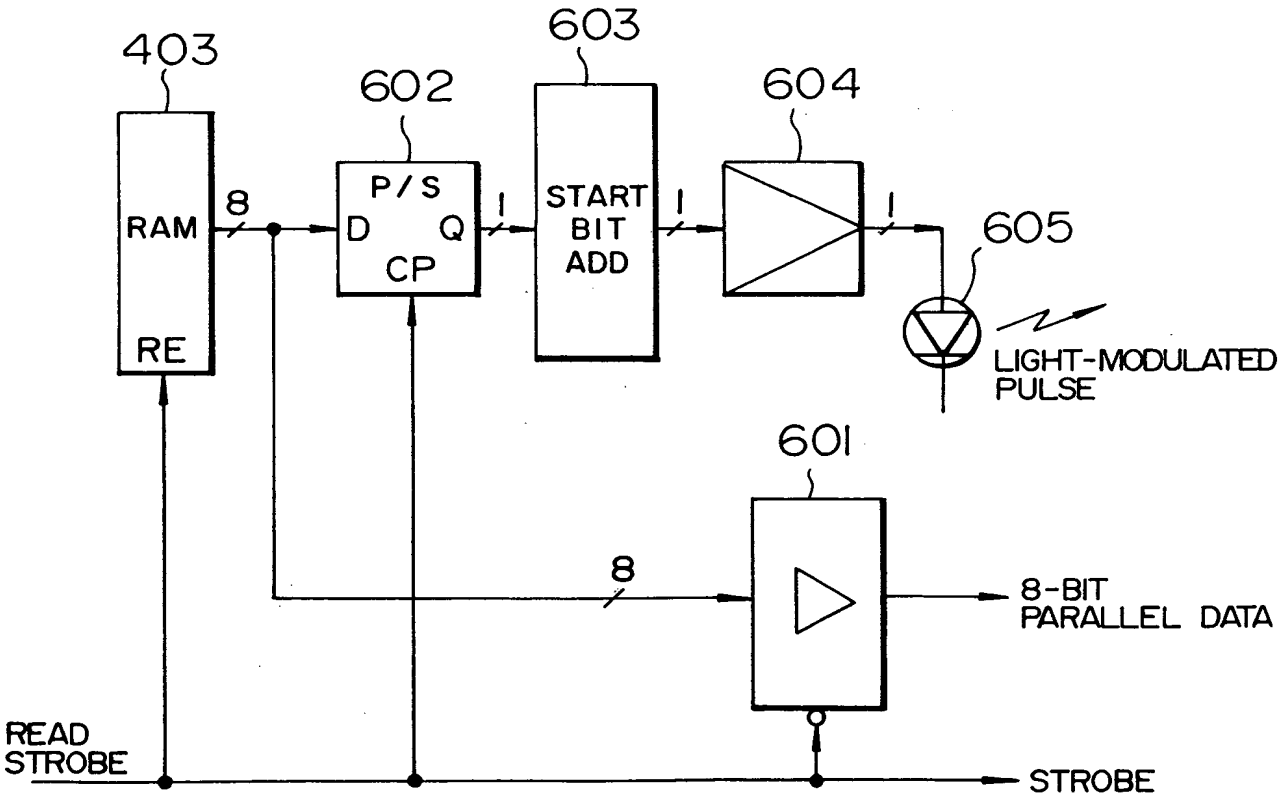
CLASS SUBCLASS
DRAFTSMAN

FIG. 5



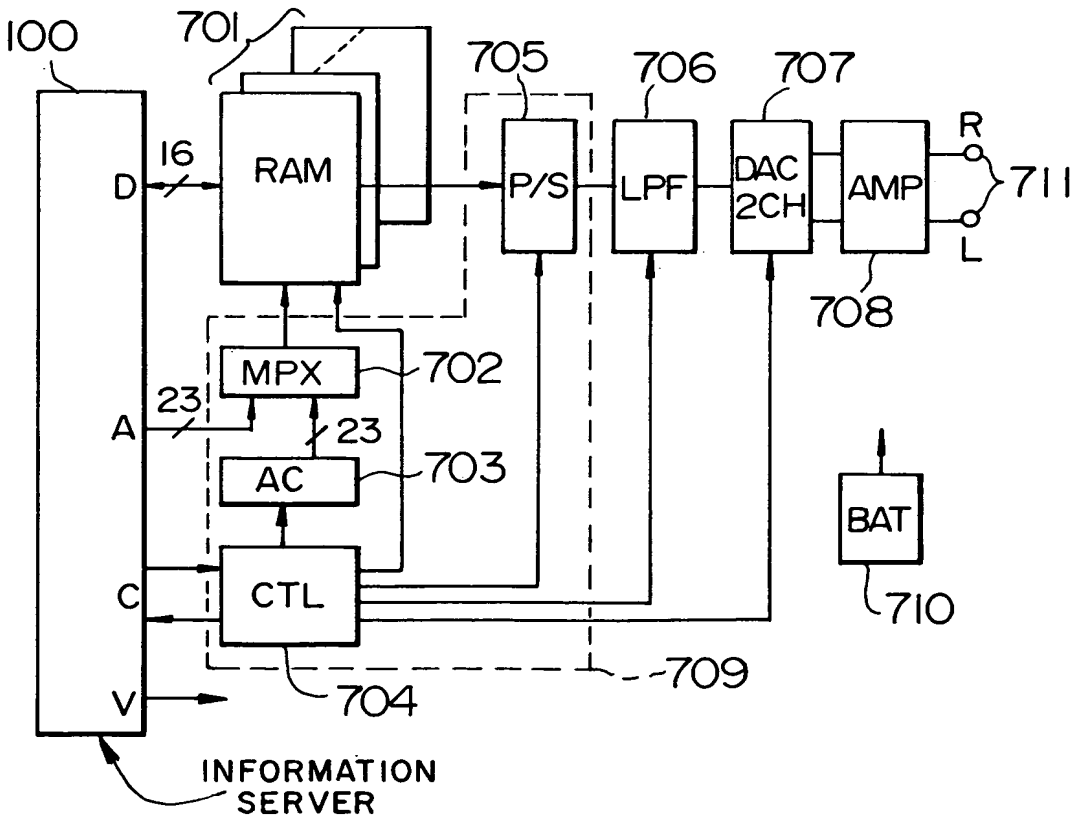
APPROVED BY DRAFTSMAN
O.G. FIG.
CLASS SUBCLASS

FIG. 6



APPROVED BY DIVISION | CLASS | SUBCLASS

FIG. 7



APPROVED BY DRAFTSMAN
U.S. PTO.
CLASS SUBCLASS

FIG. 8

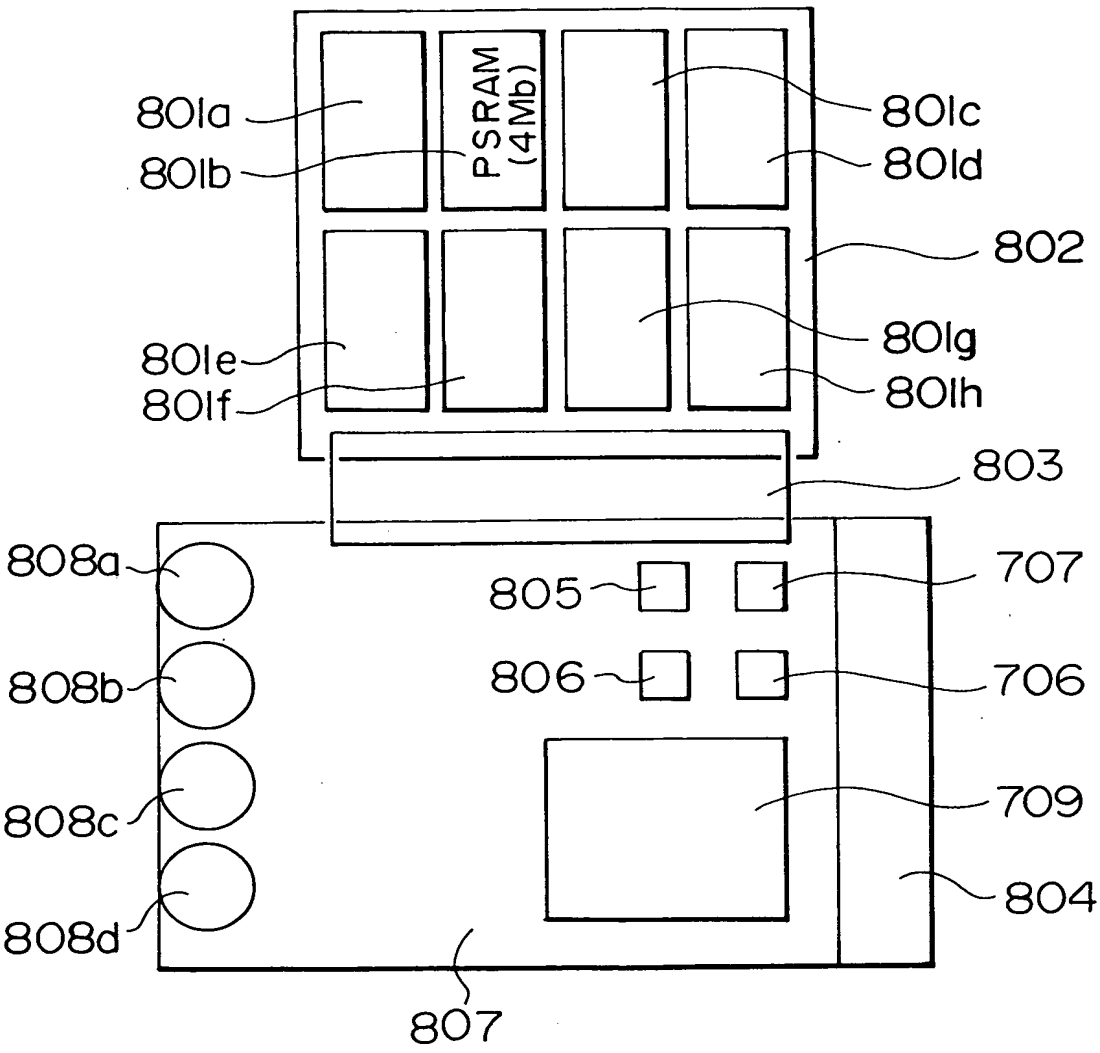
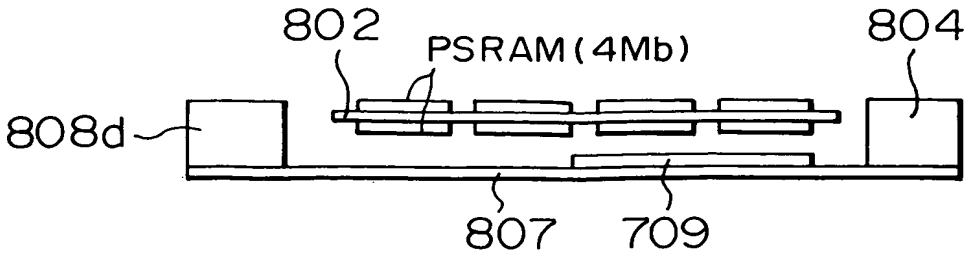



FIG. 9



CLASS SUBCLASS

FIG.10

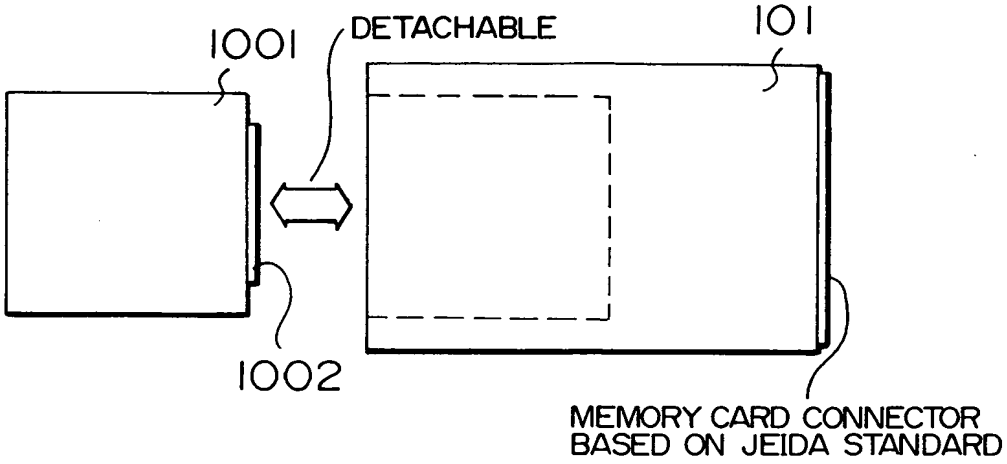
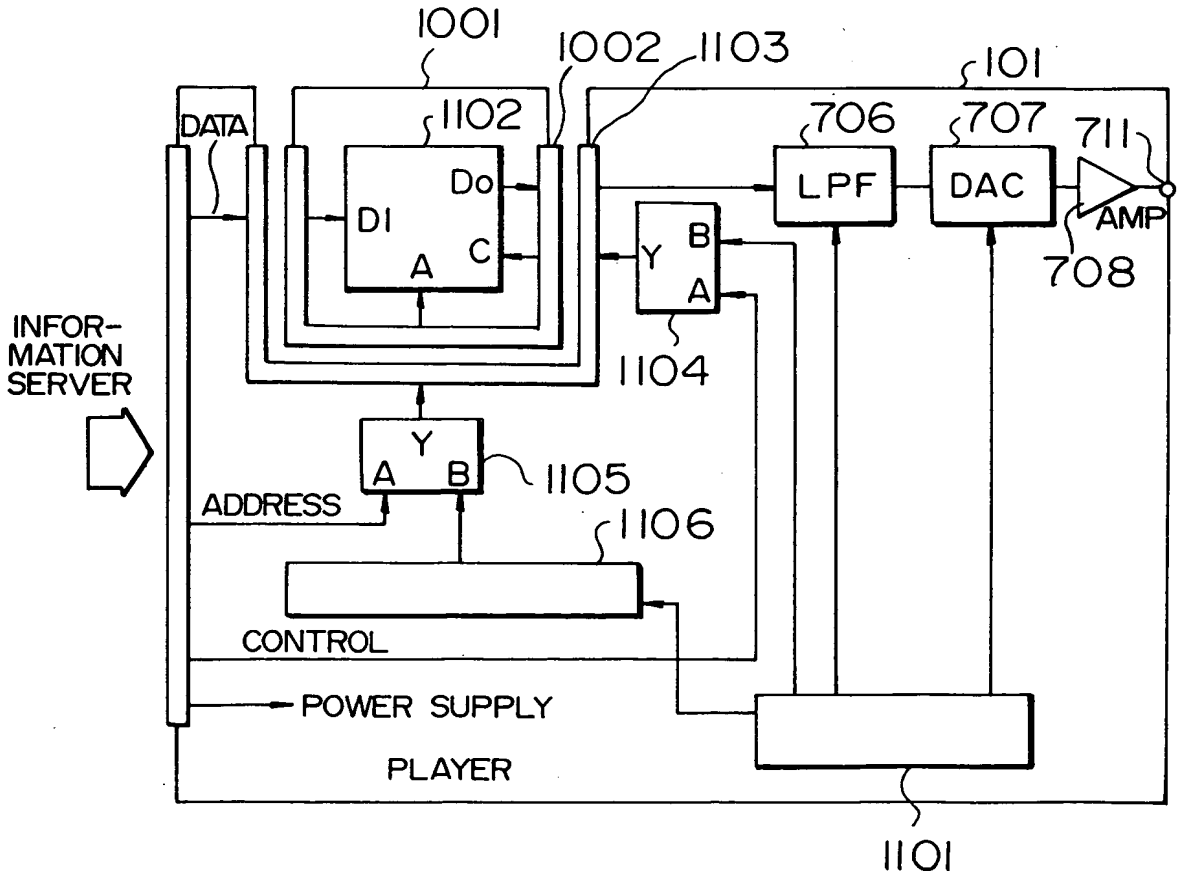



FIG.11



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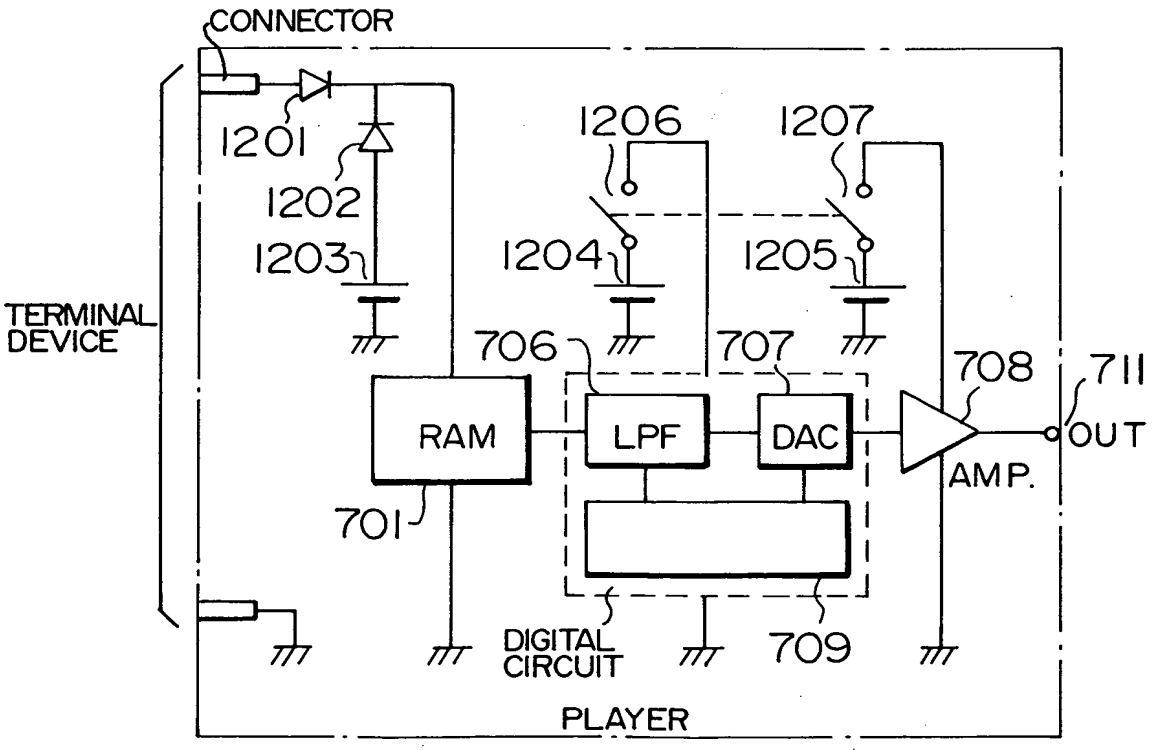
DRAFTSMAN
CLASS
SUBCLASS

FIG.12



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CLASS SUBCLASS

FIG. 13

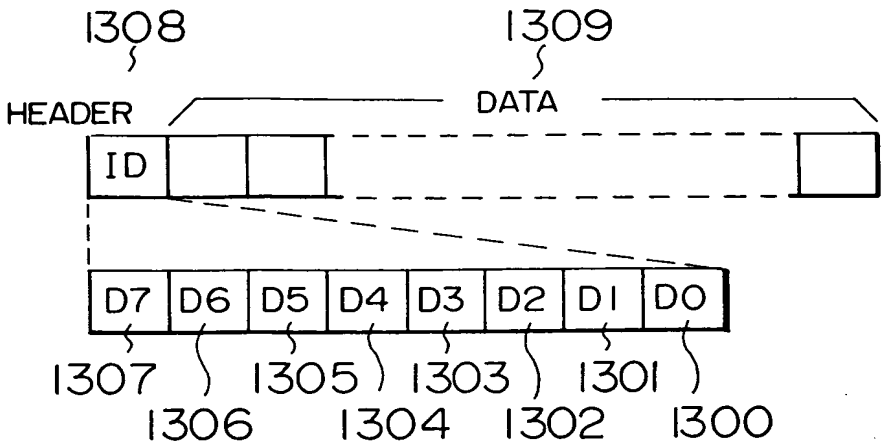
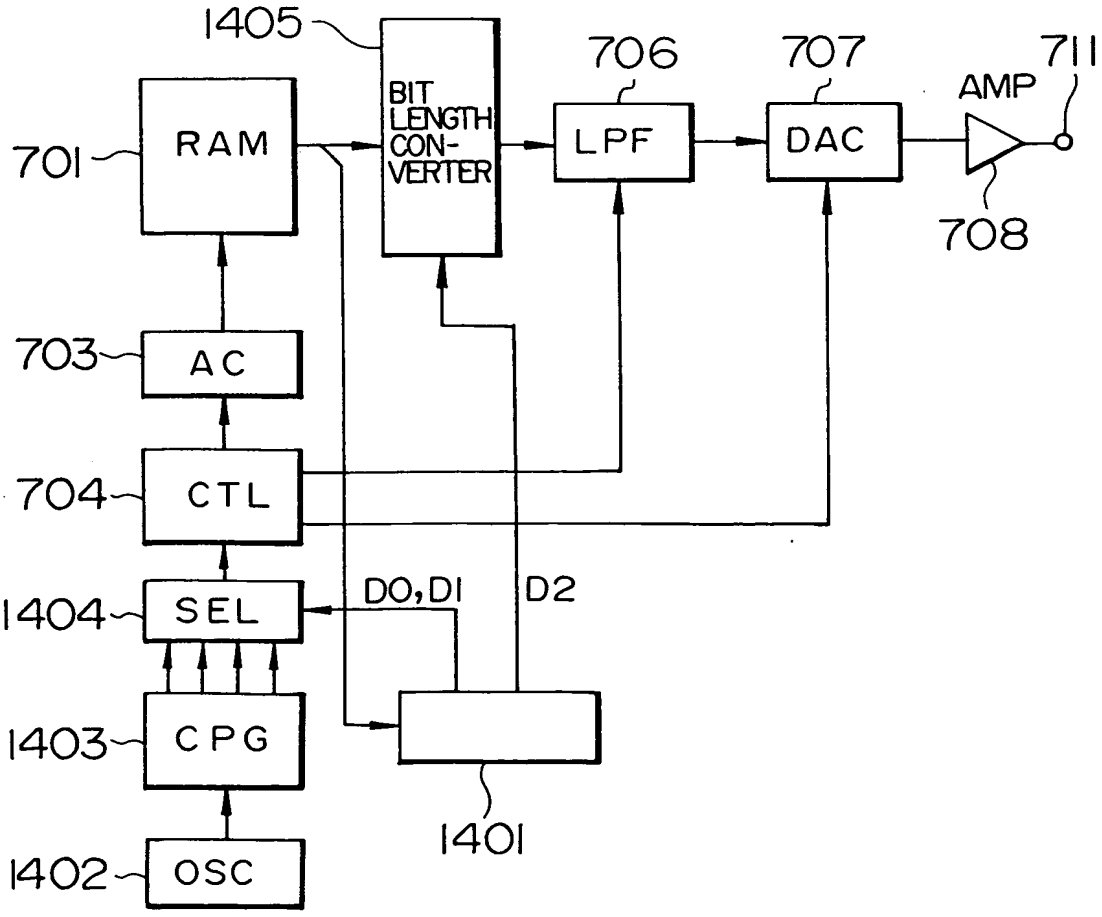



FIG. 14



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG.15

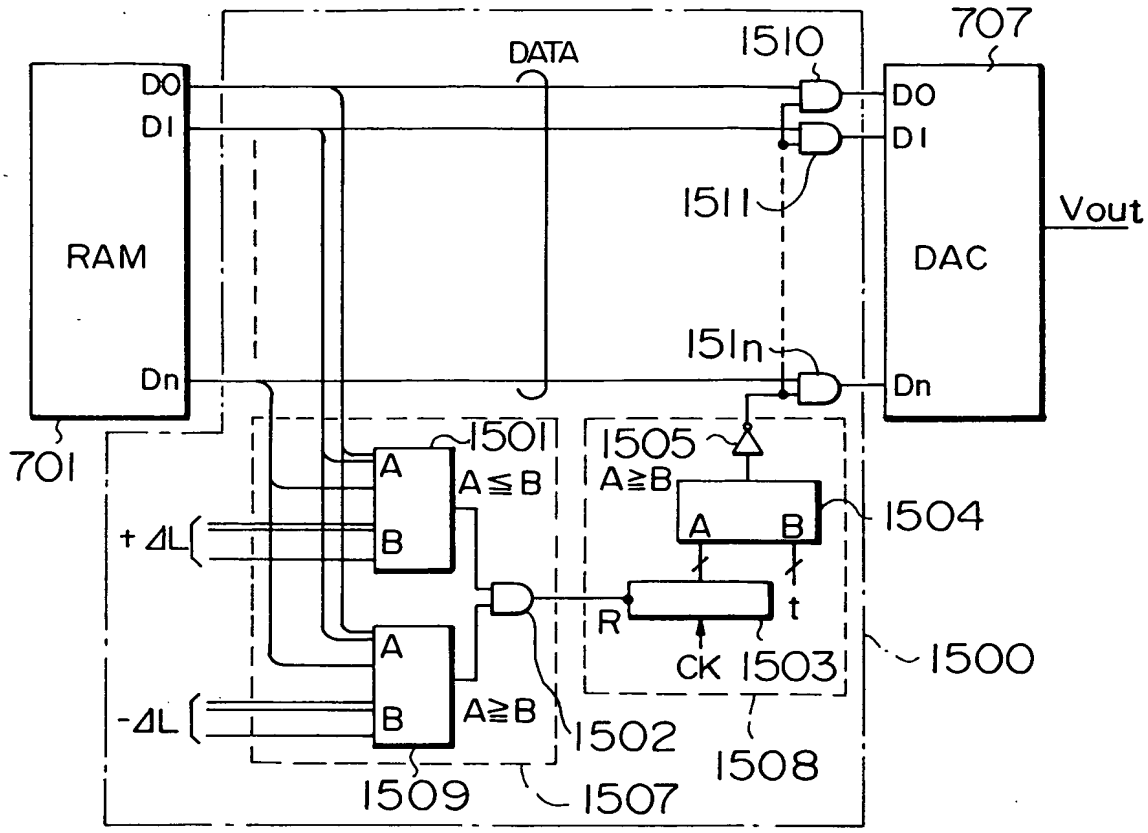
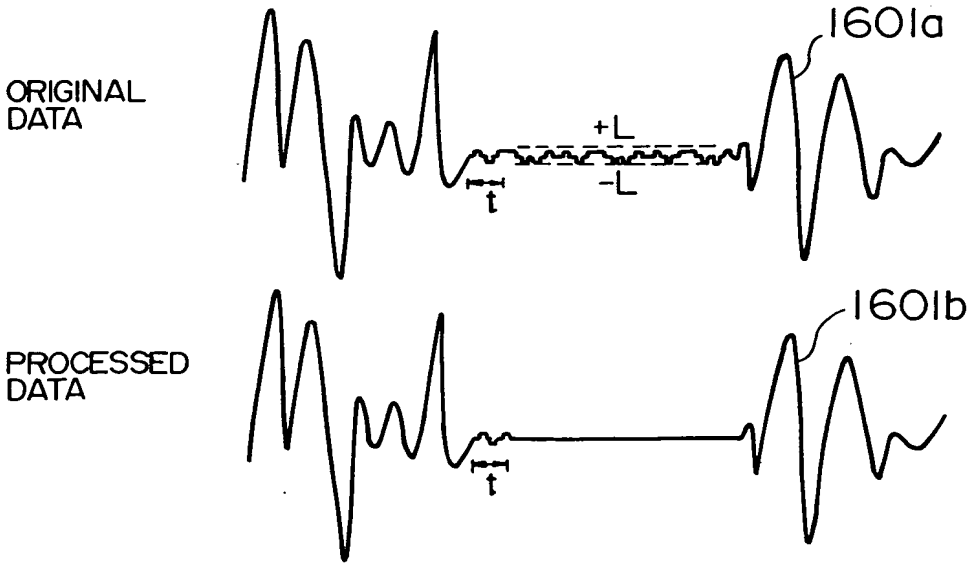



FIG.16



APPROVED BY DIVISION
CLASS SUBCLASS

FIG.17

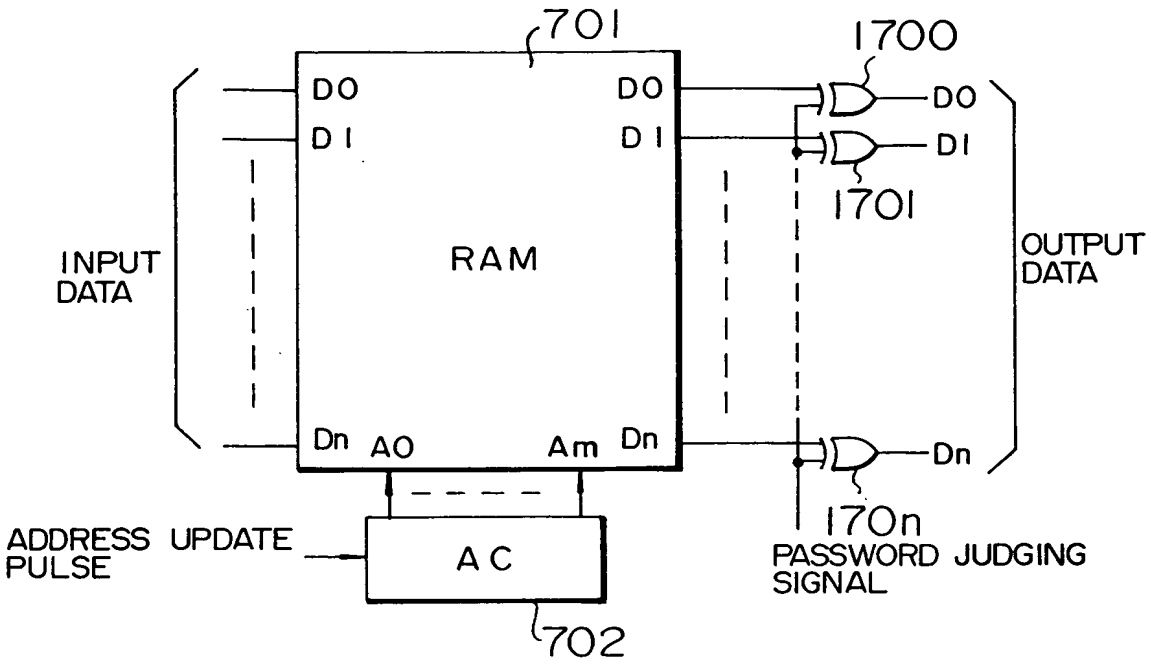
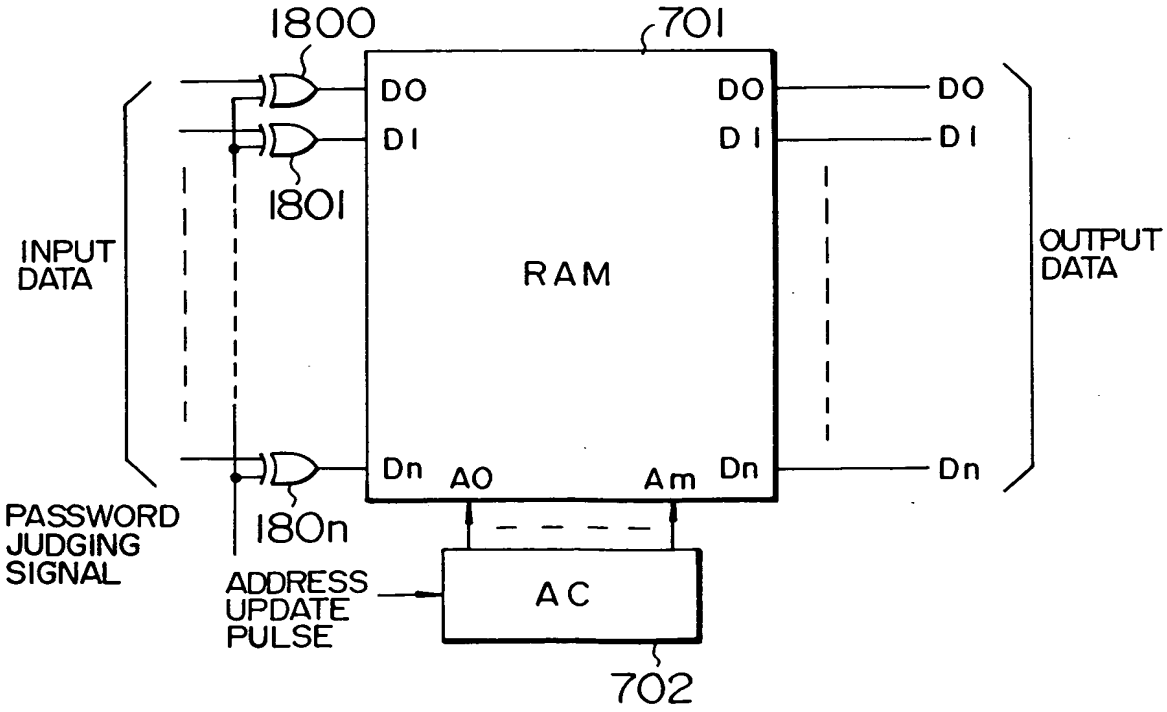



FIG.18



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 19

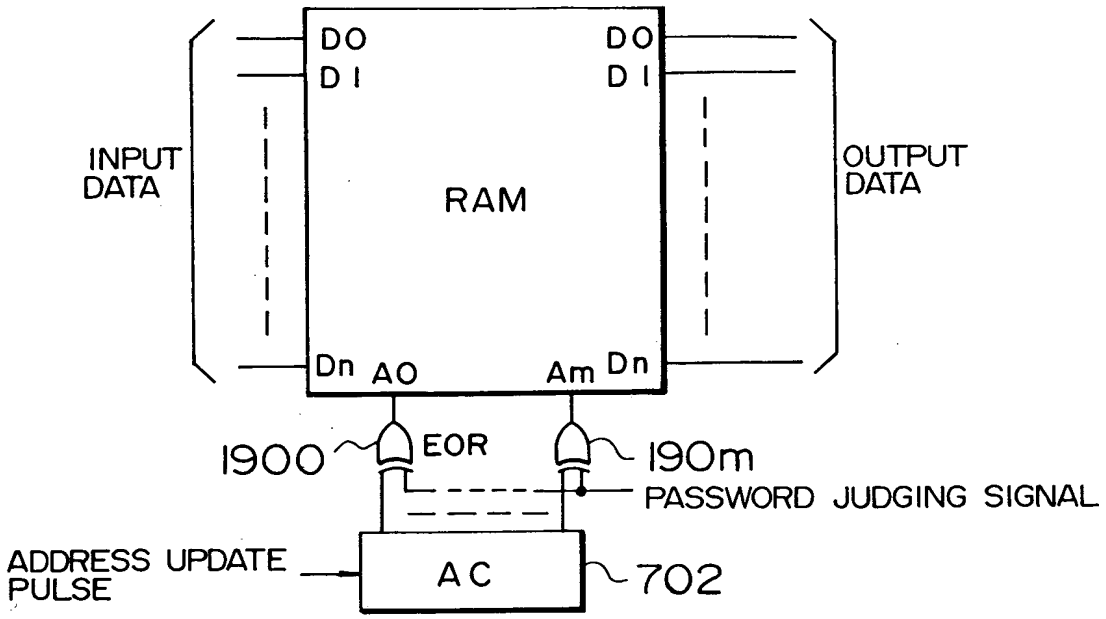
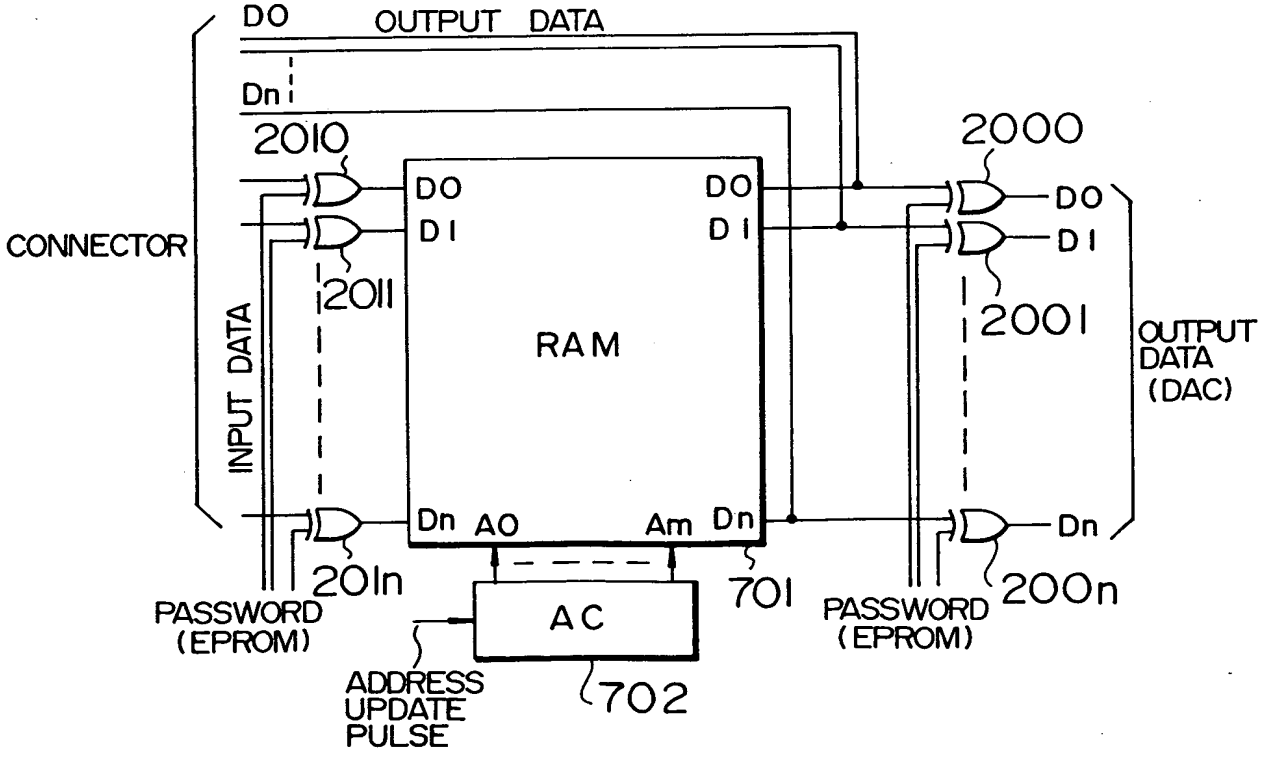



FIG. 20



CLASS SUBCLASS

FIG. 21

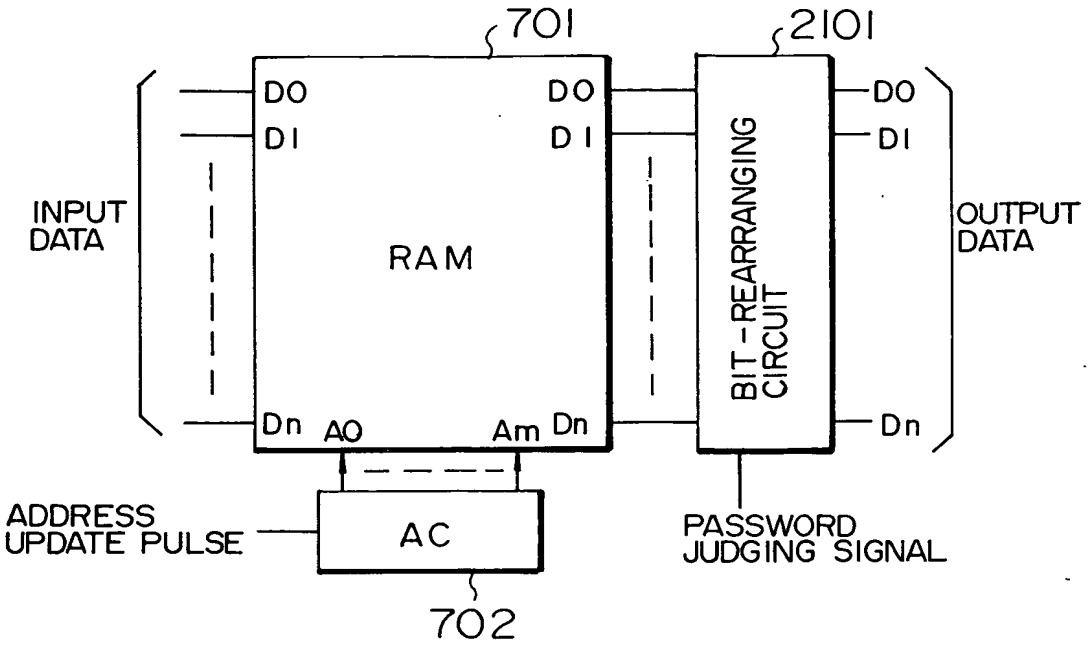
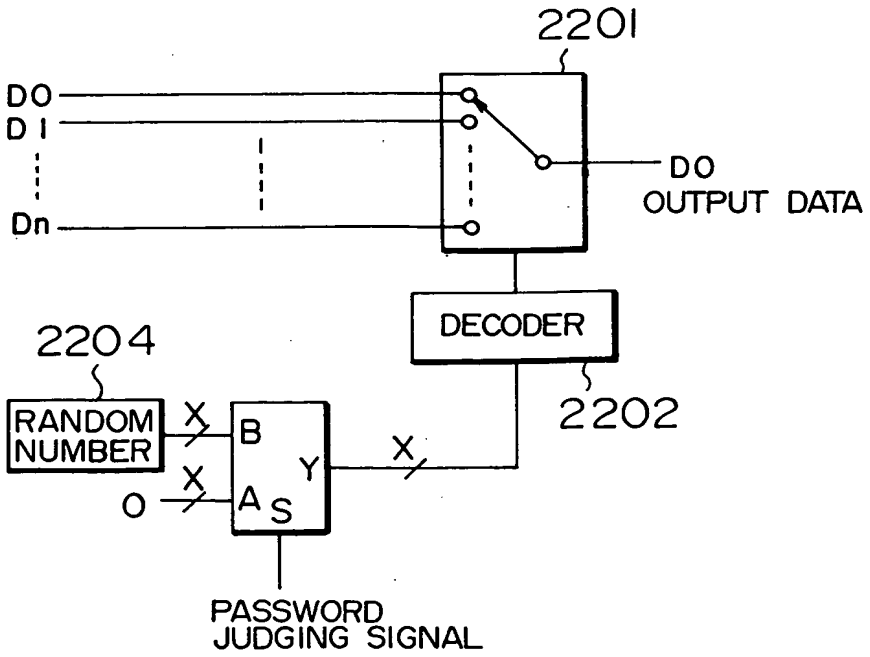



FIG. 22



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CLASS SUBCLASS

FIG. 23

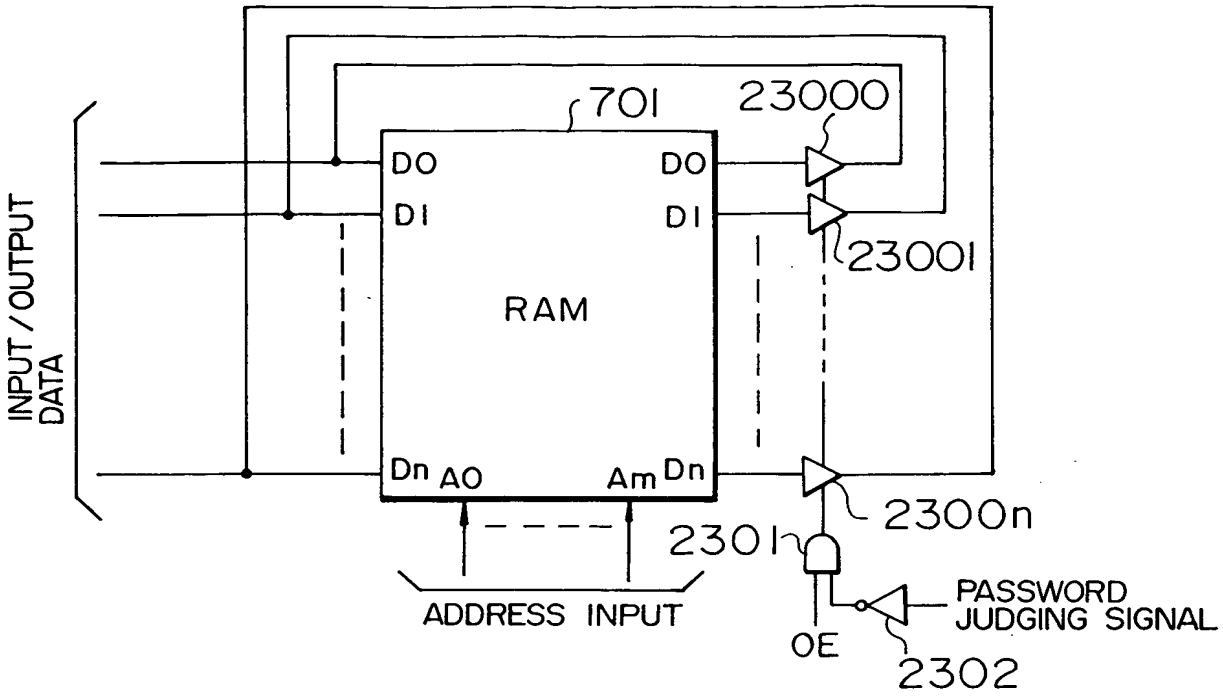
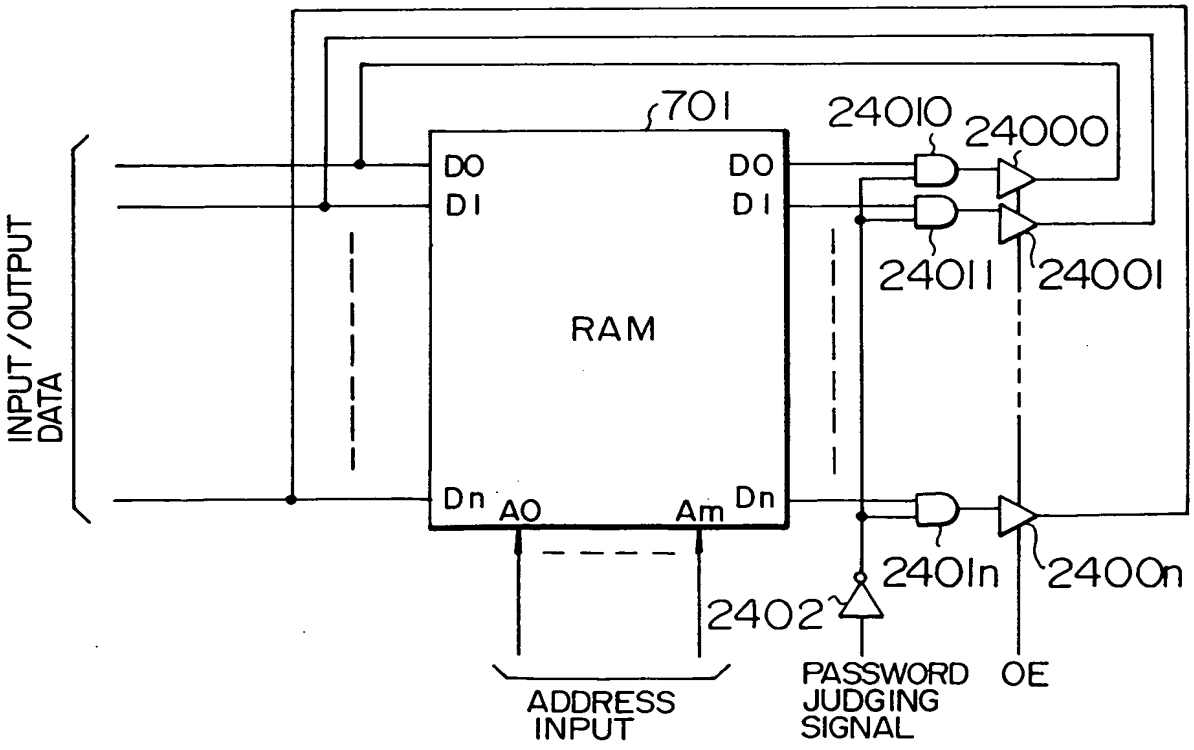
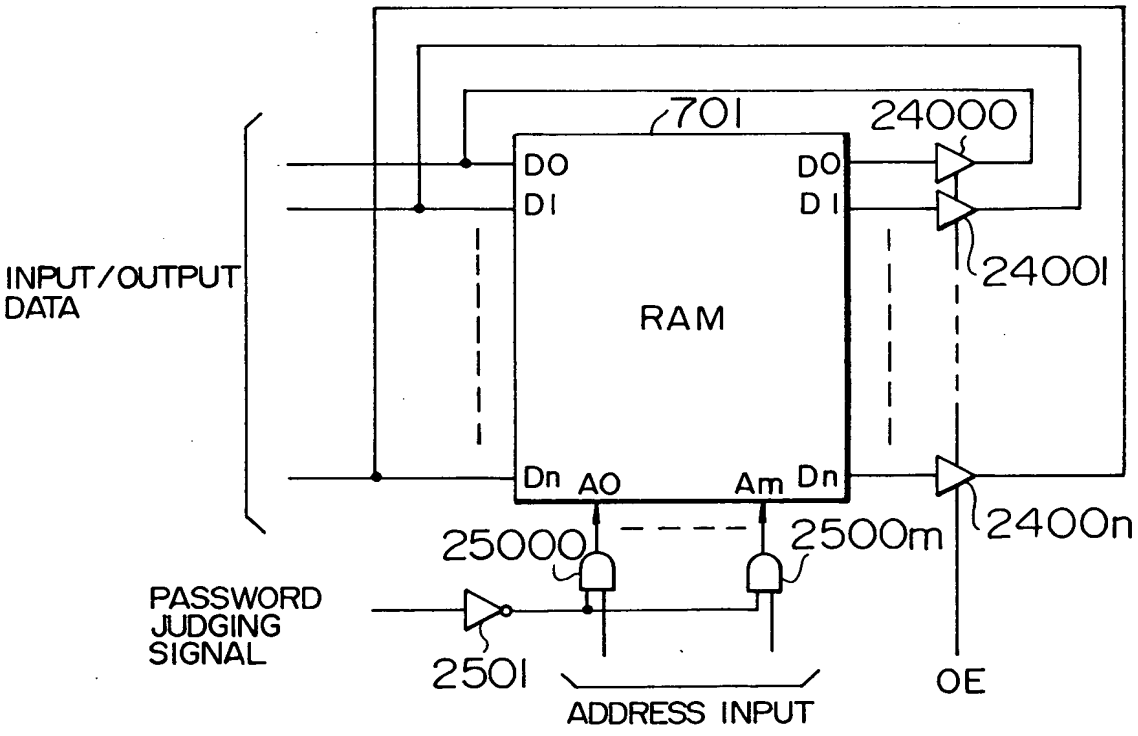



FIG. 24



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 25



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 26

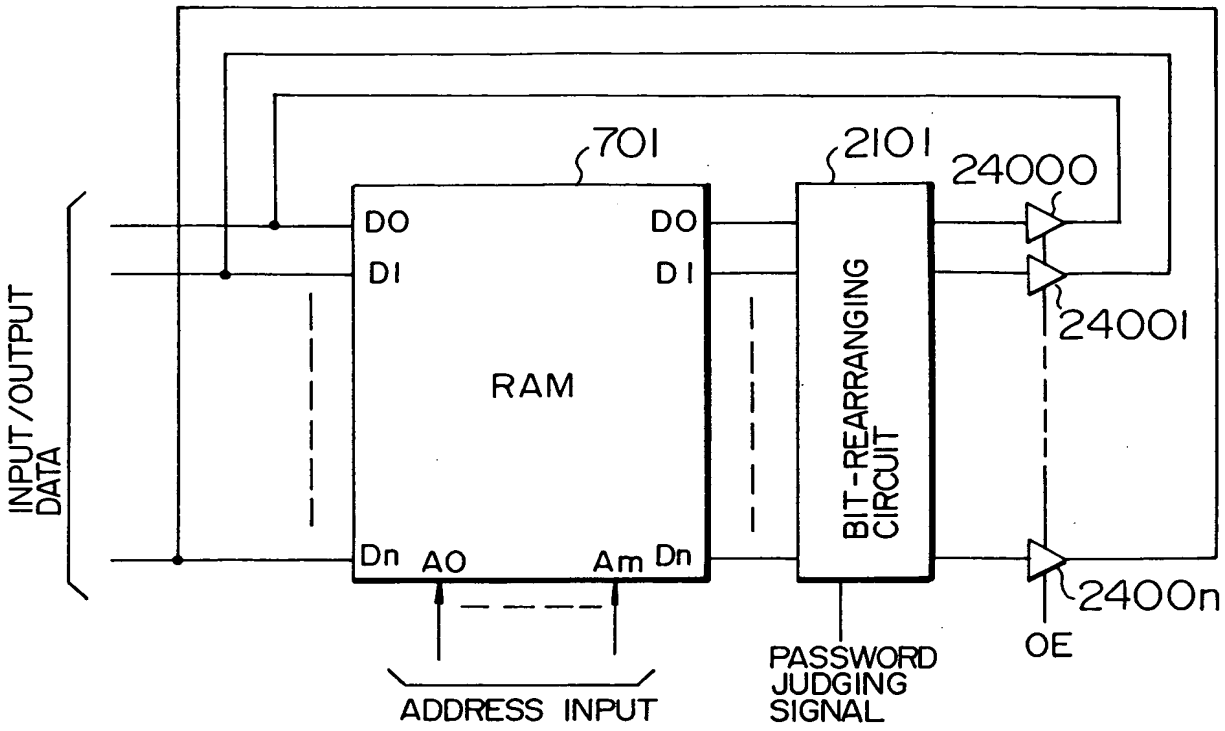
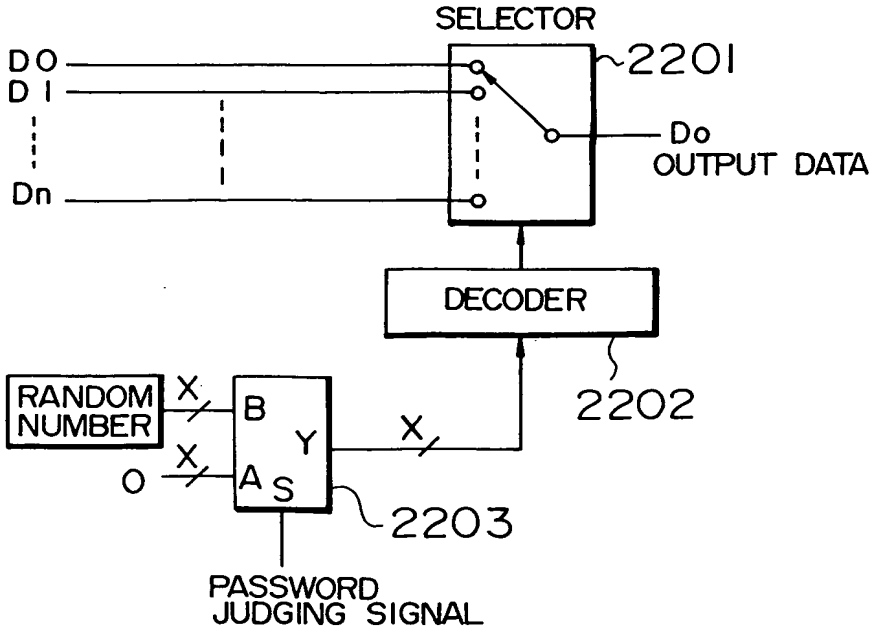



FIG. 27



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CLASS SUBCLASS

FIG. 28

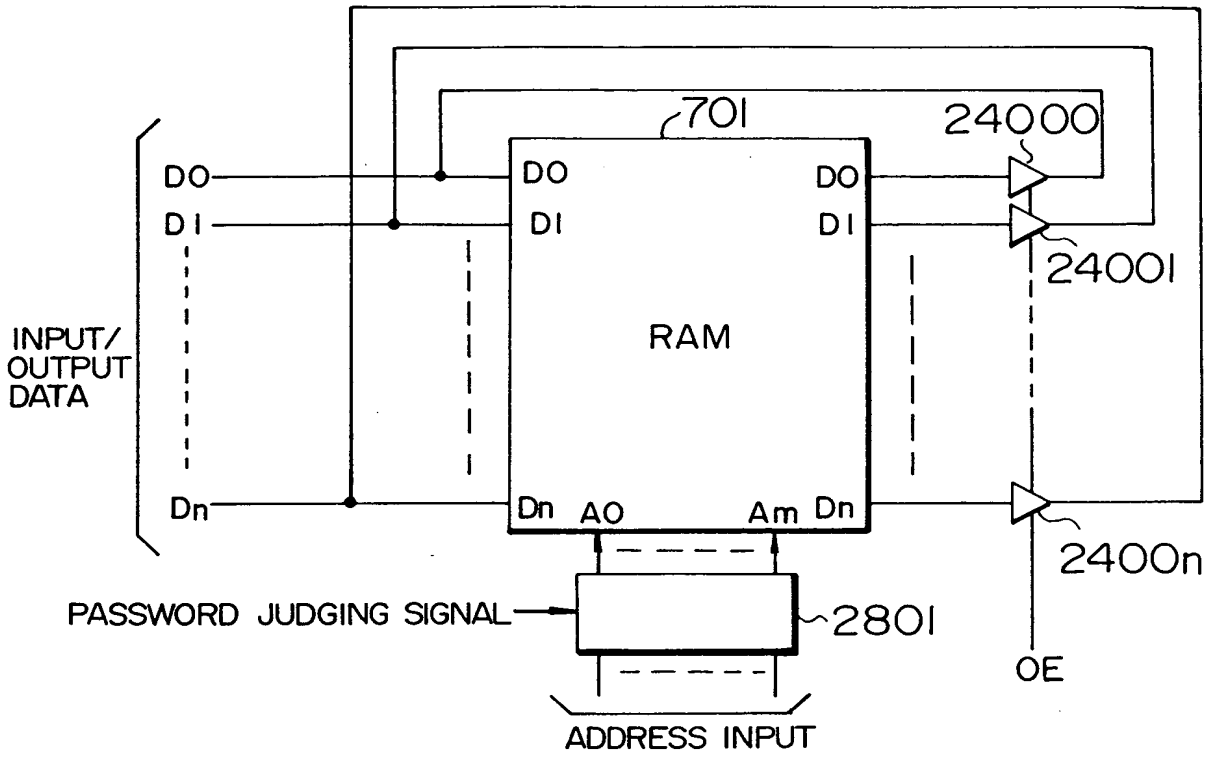
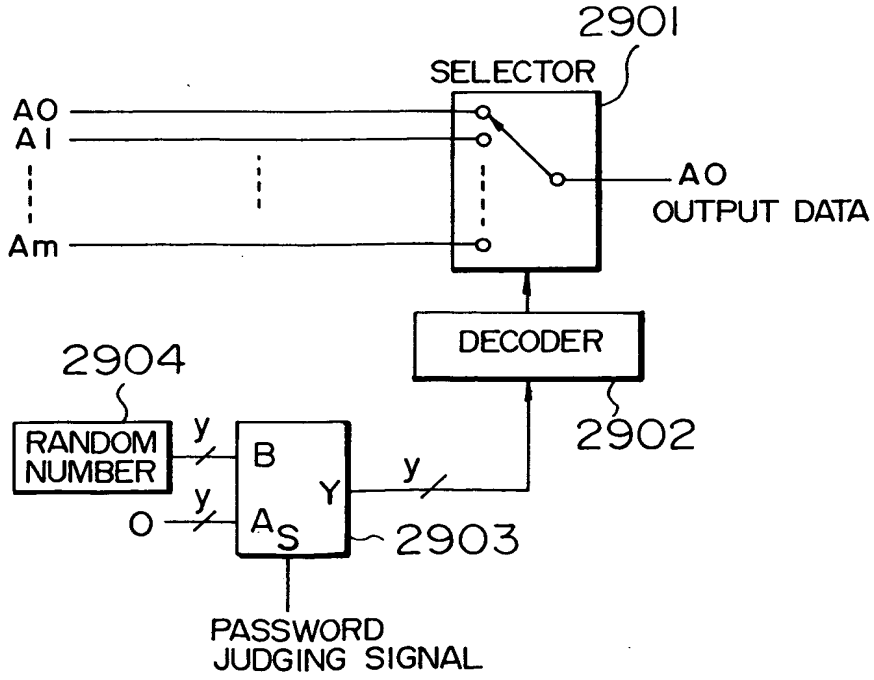



FIG. 29



APPROVED BY DRAFTSMAN CLASS SUBCLASS

FIG. 30

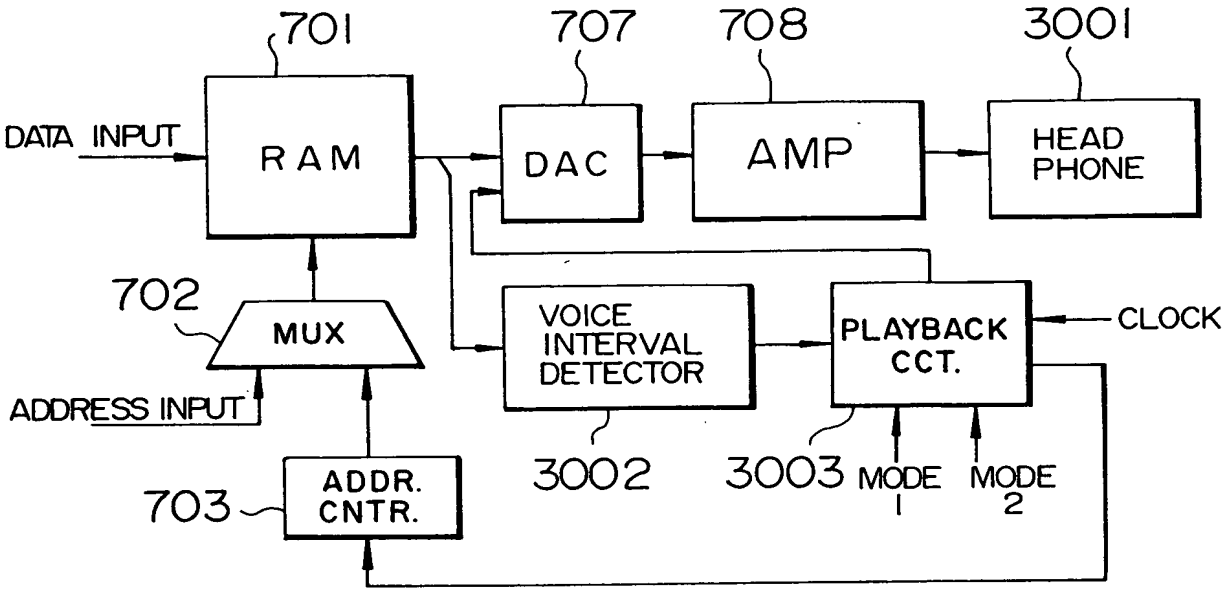
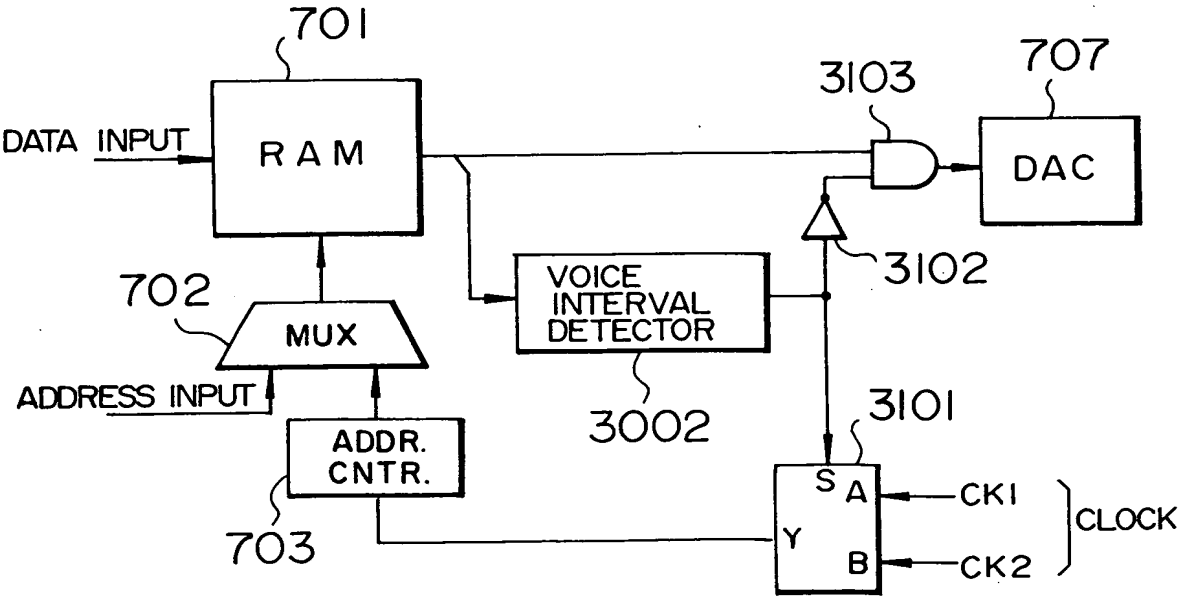
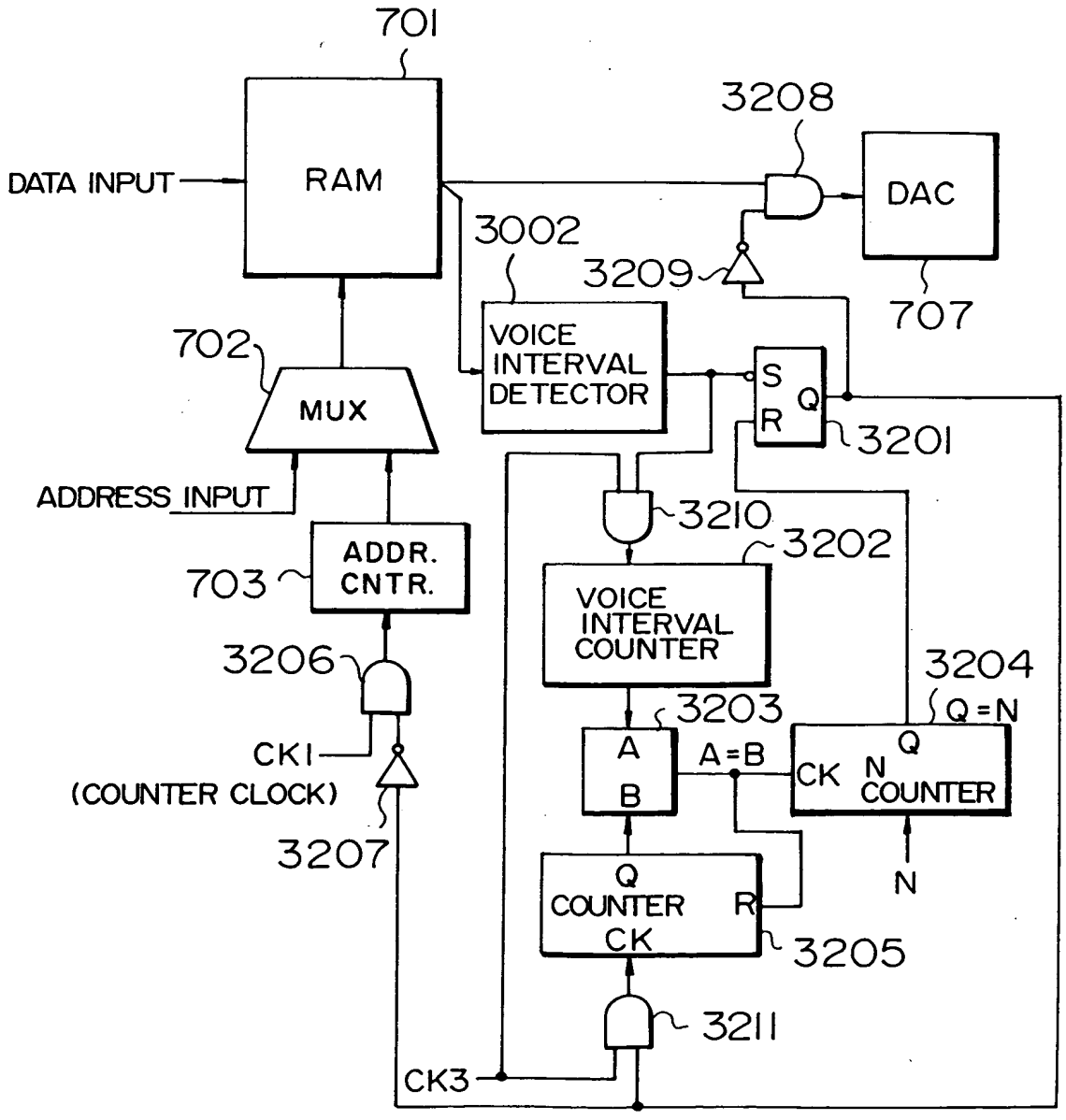



FIG. 31



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 32



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BY
SUBCLASS

FIG. 33

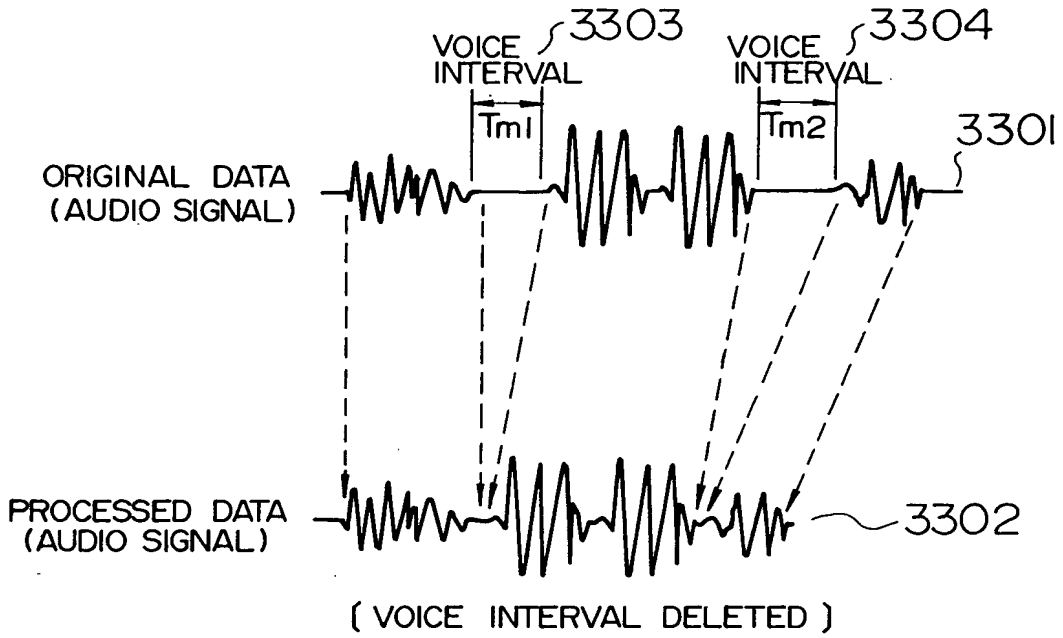
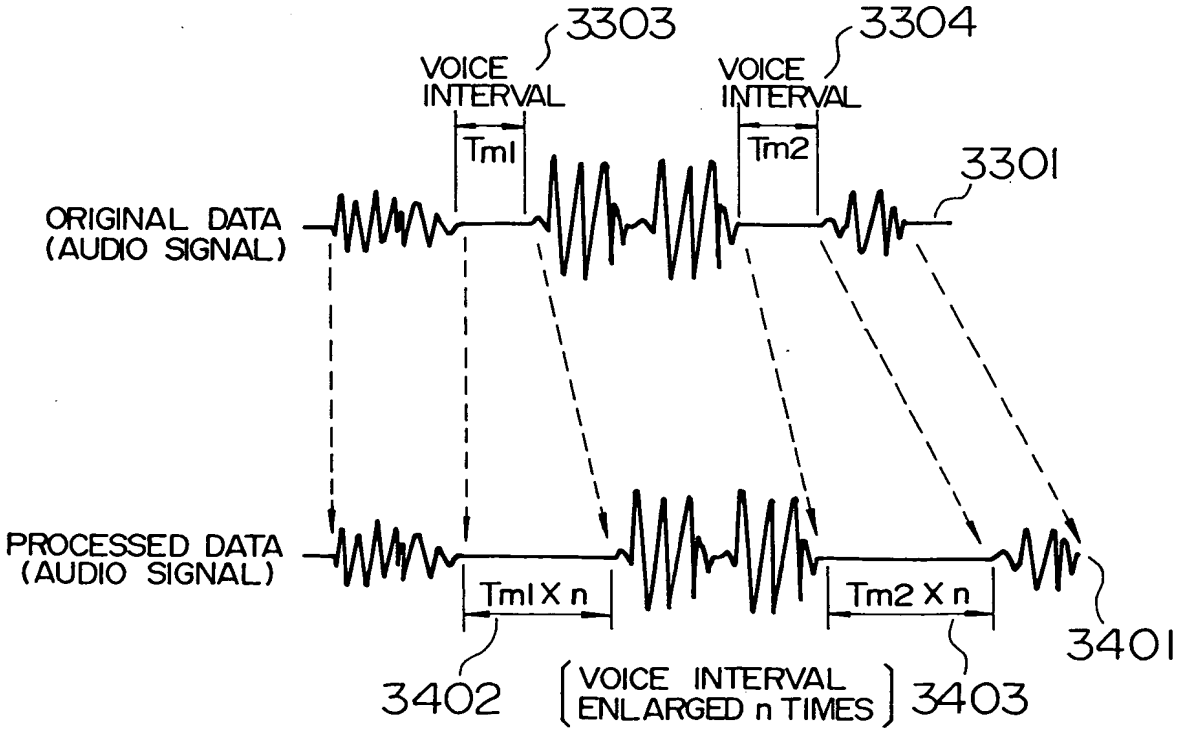



FIG. 34



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 35

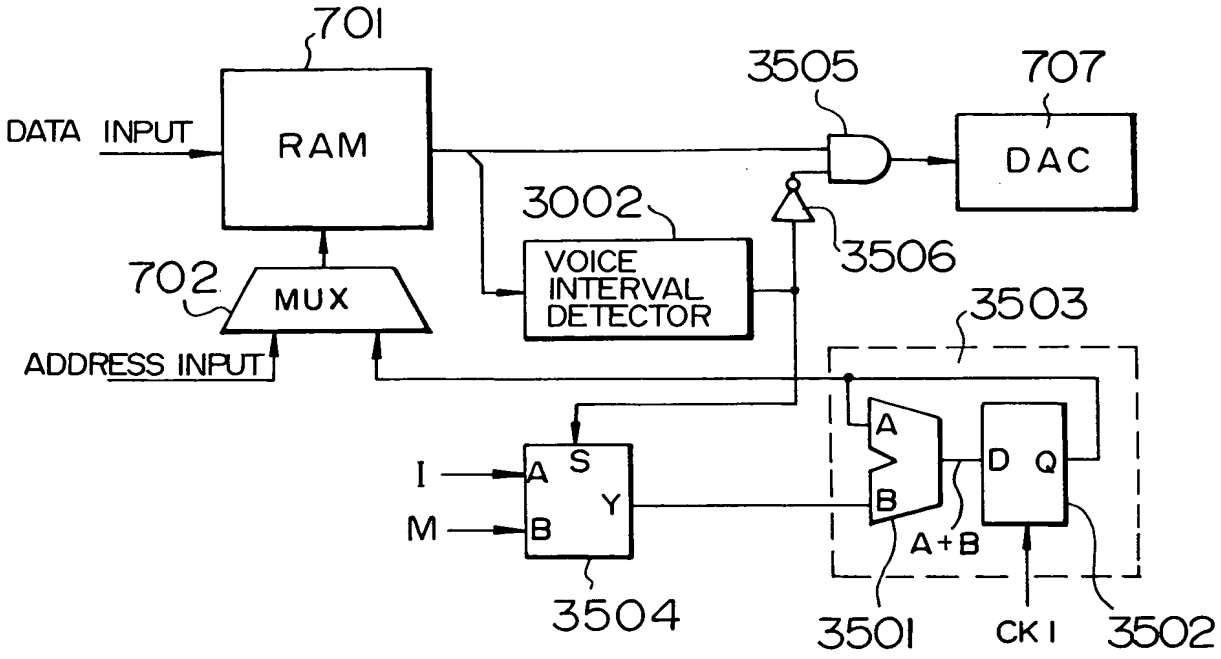
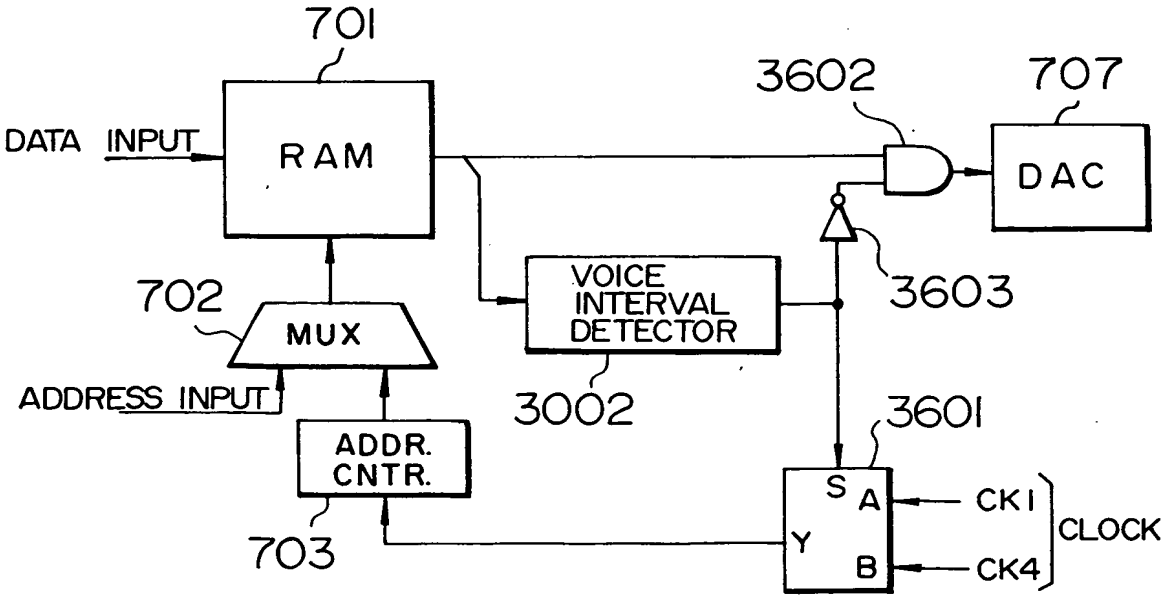
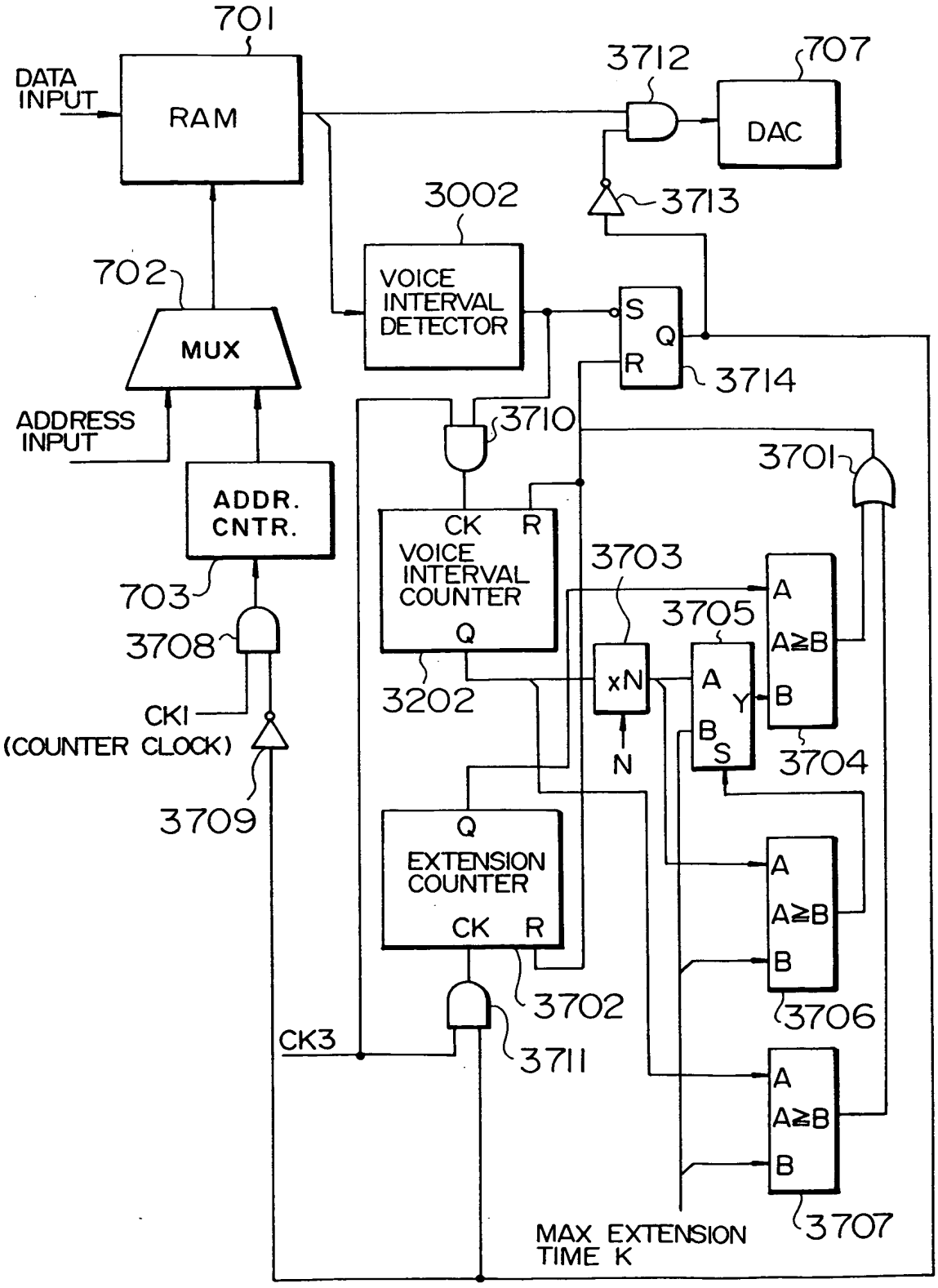



FIG. 36



SUBCLASS
DRAFTSMAN

FIG.37



APPROVED BY DRAFTSMAN SUBCLASS

FIG. 38

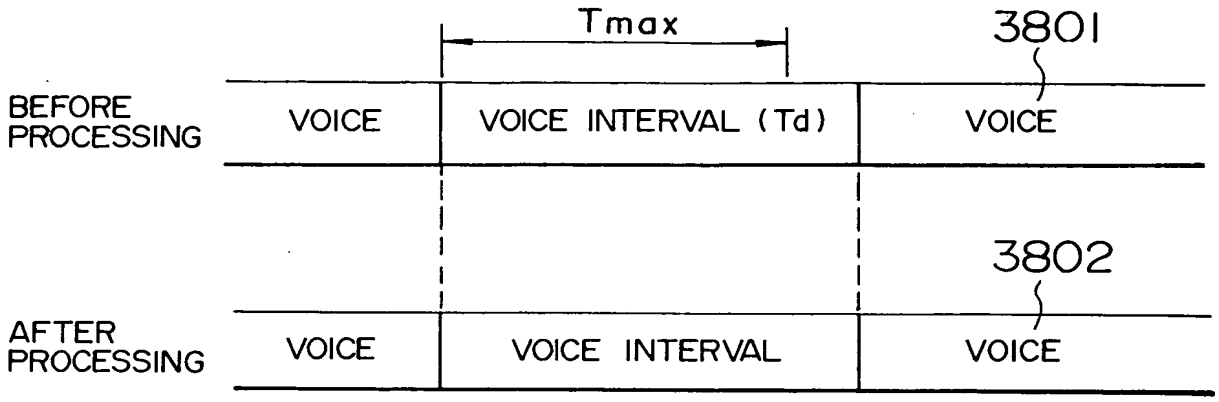



FIG. 39

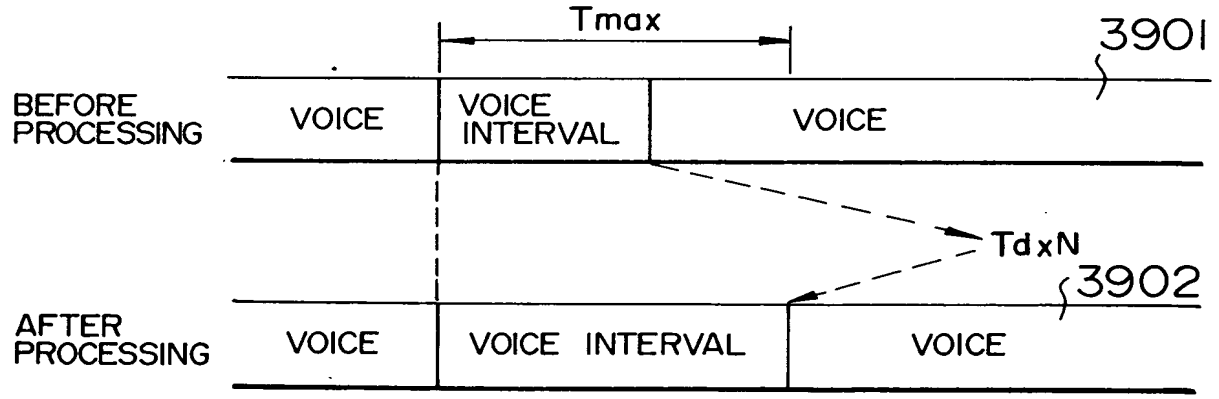
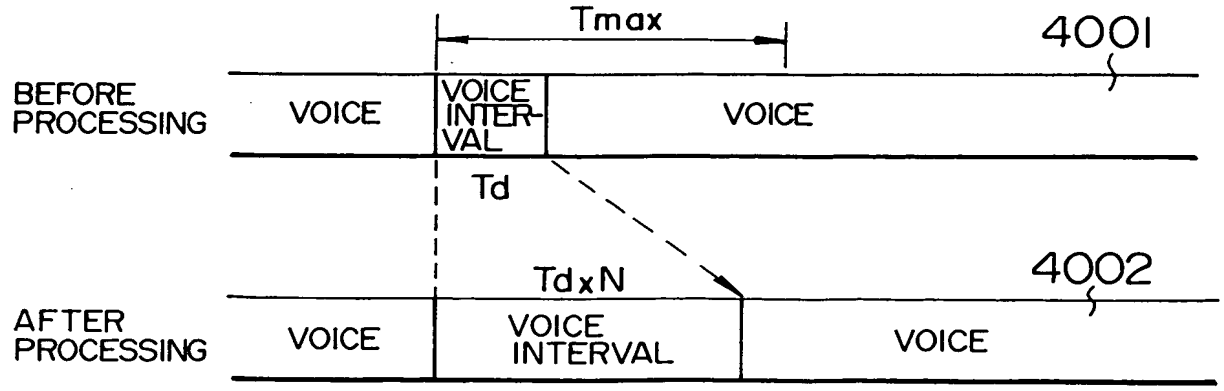



FIG. 40



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 41

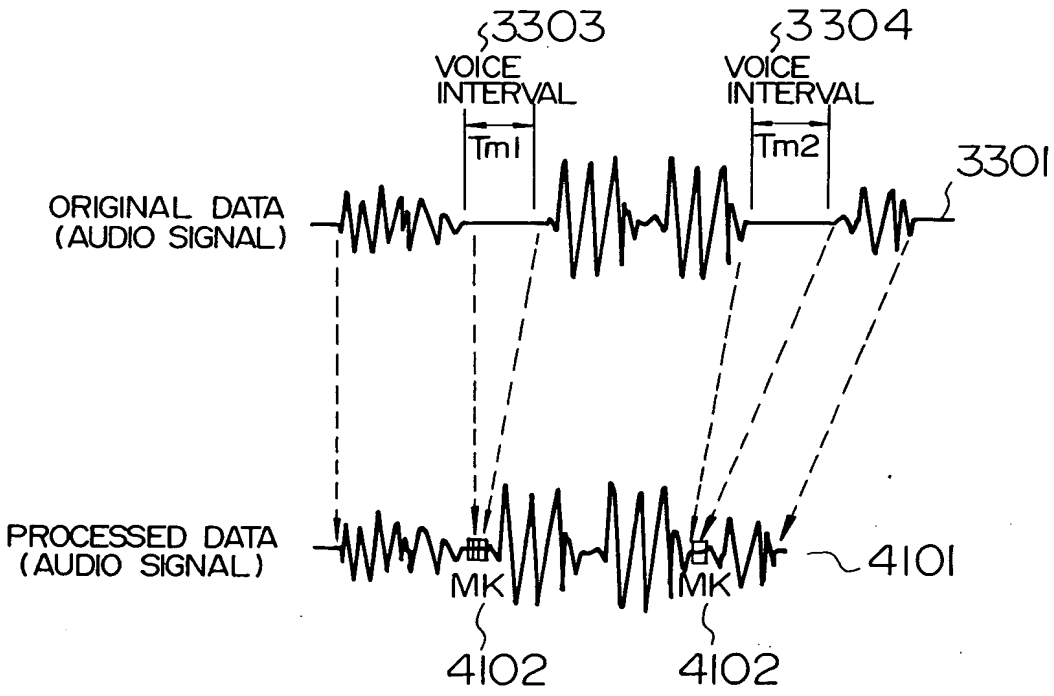
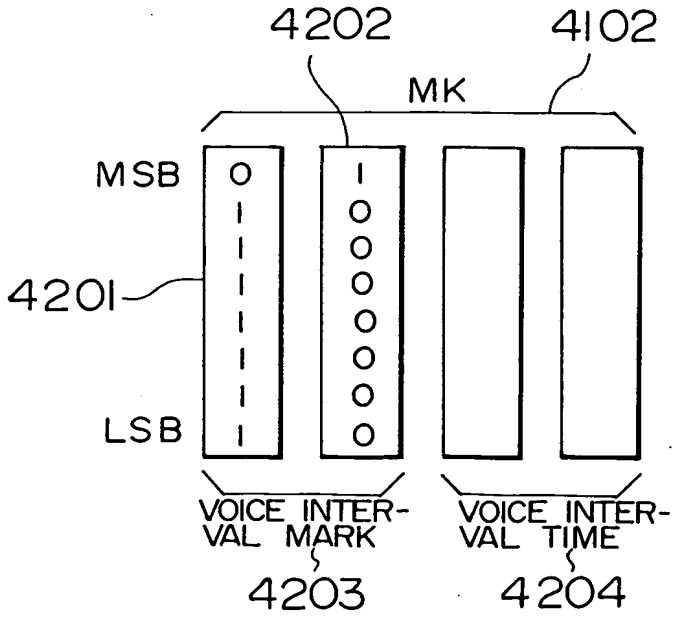



FIG. 42

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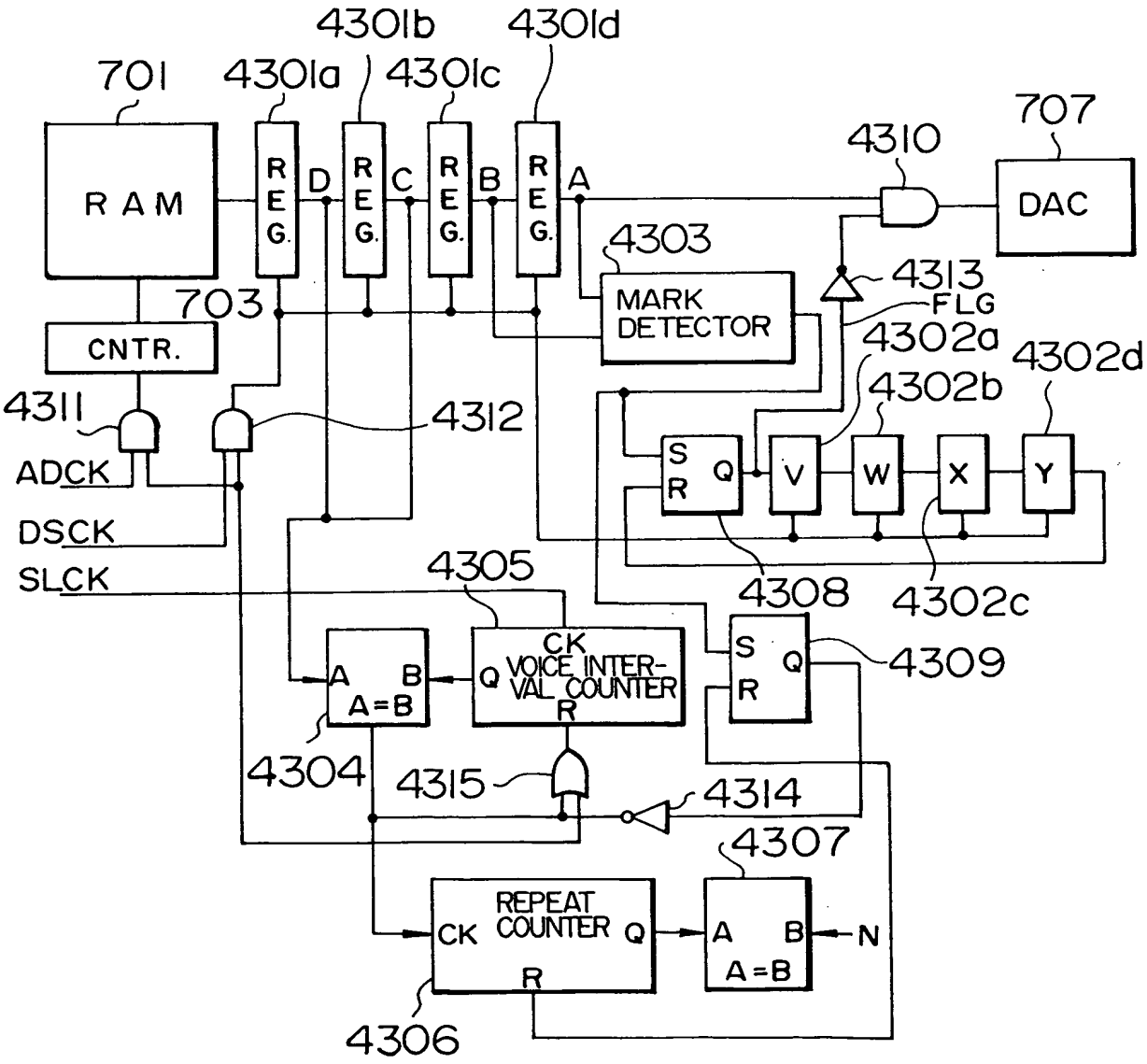
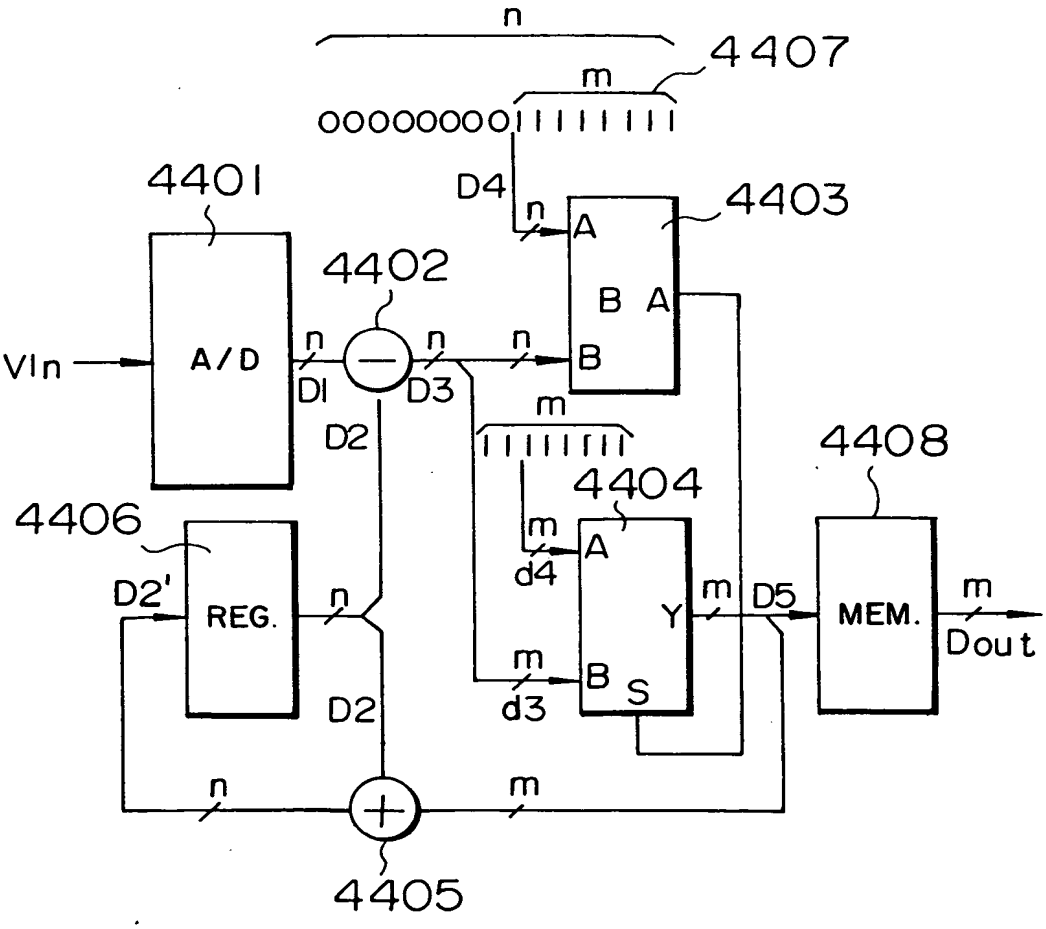
BY | CLASS | SUBCLASS
EXAMINER

FIG. 43



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 44



APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 45

FIG. 46

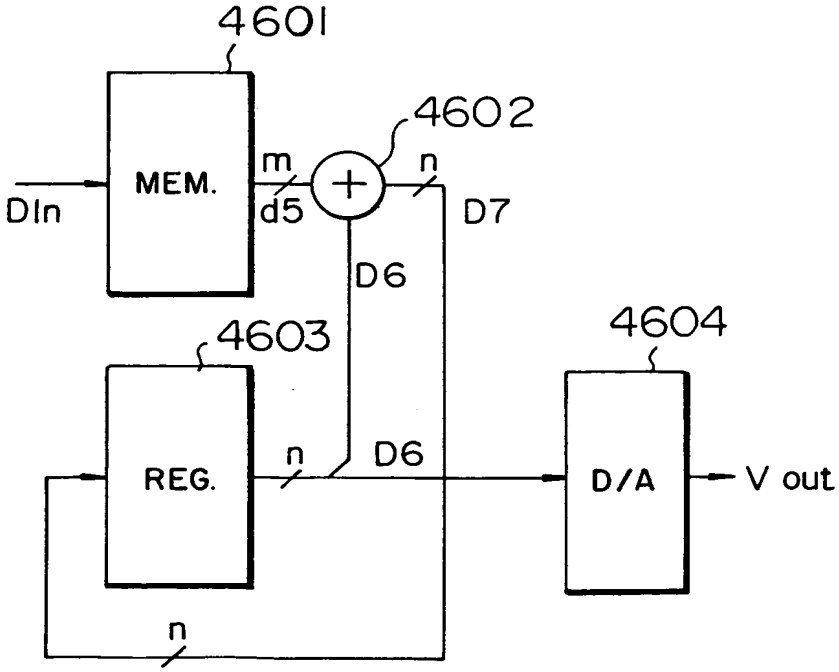


FIG. 47

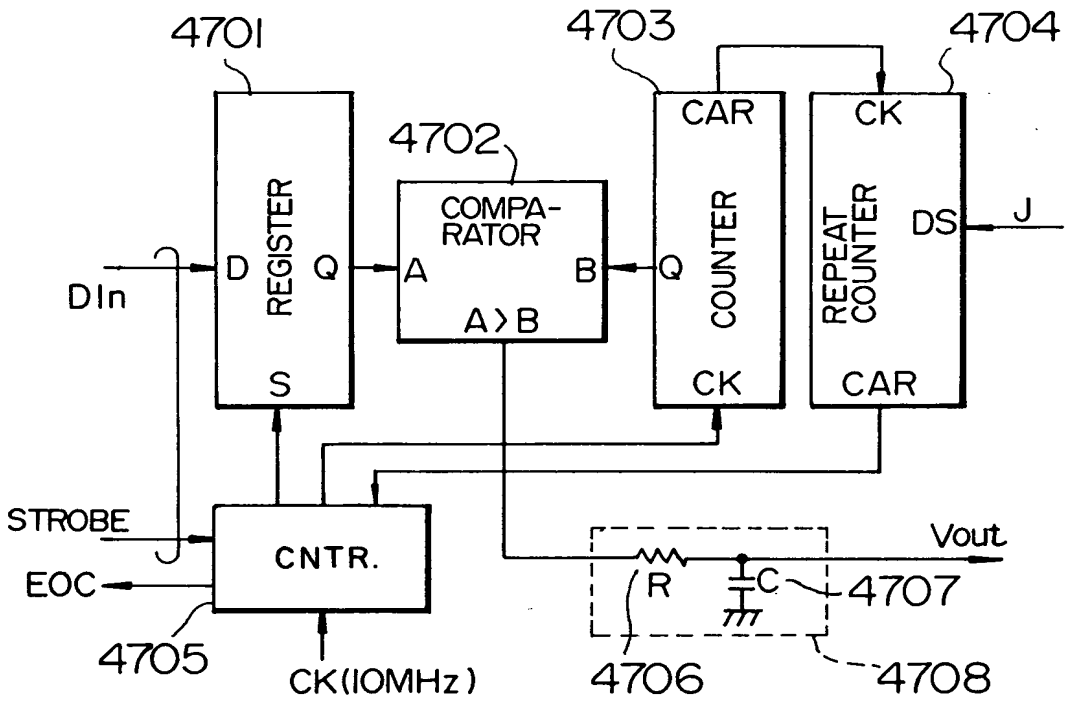
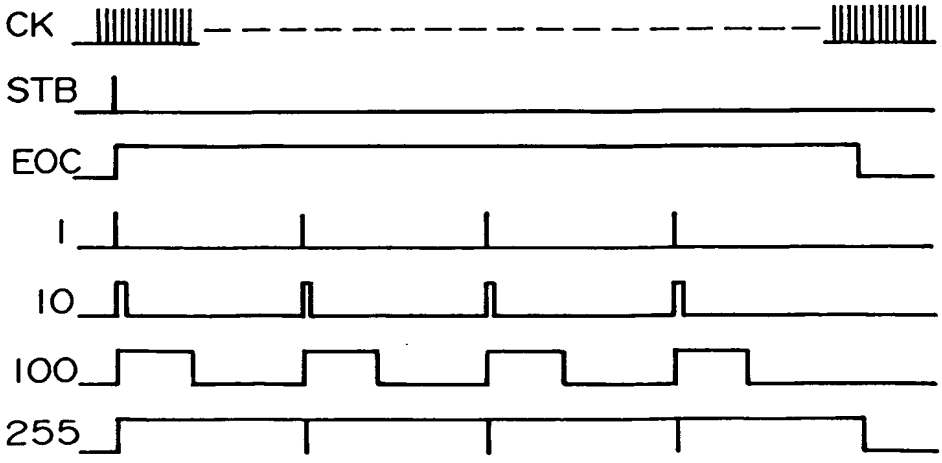
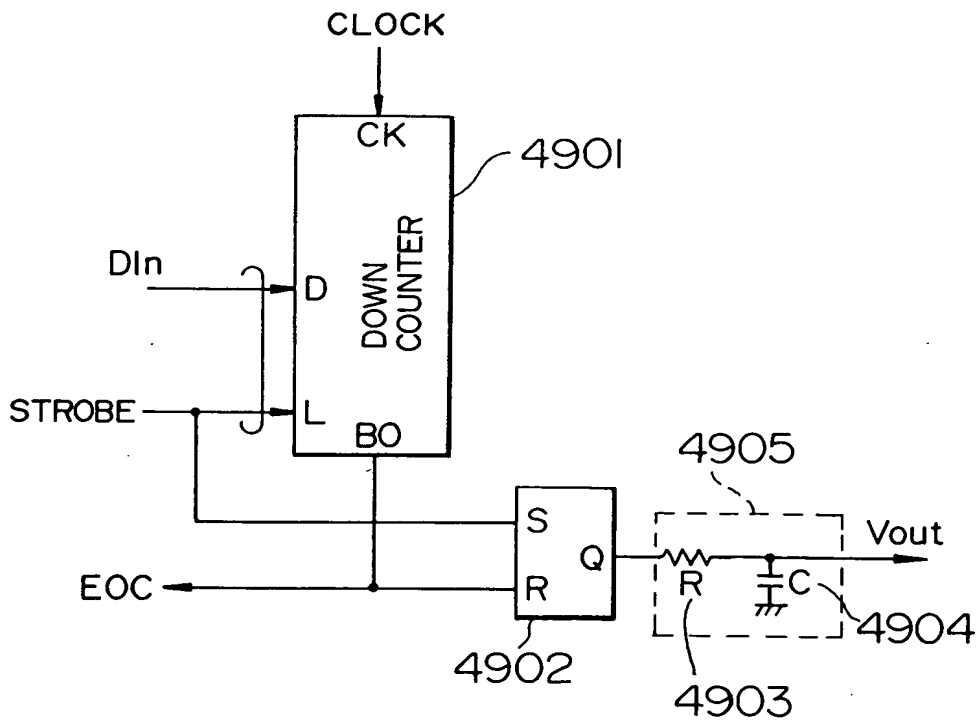

4701
4703
4704
4702
REGISTER
COMPA-
RATOR
COUNTER
REPEAT
COUNTER
CAR
CK
D
Q
S
A
B
A>B
DS
J
DIn
STROBE
EOC
CNTR.
Vout
R
C
4707
4705
CK(10MHz)
4706
4708

FIG. 48


CK
STB
EOC
1
10
100
255

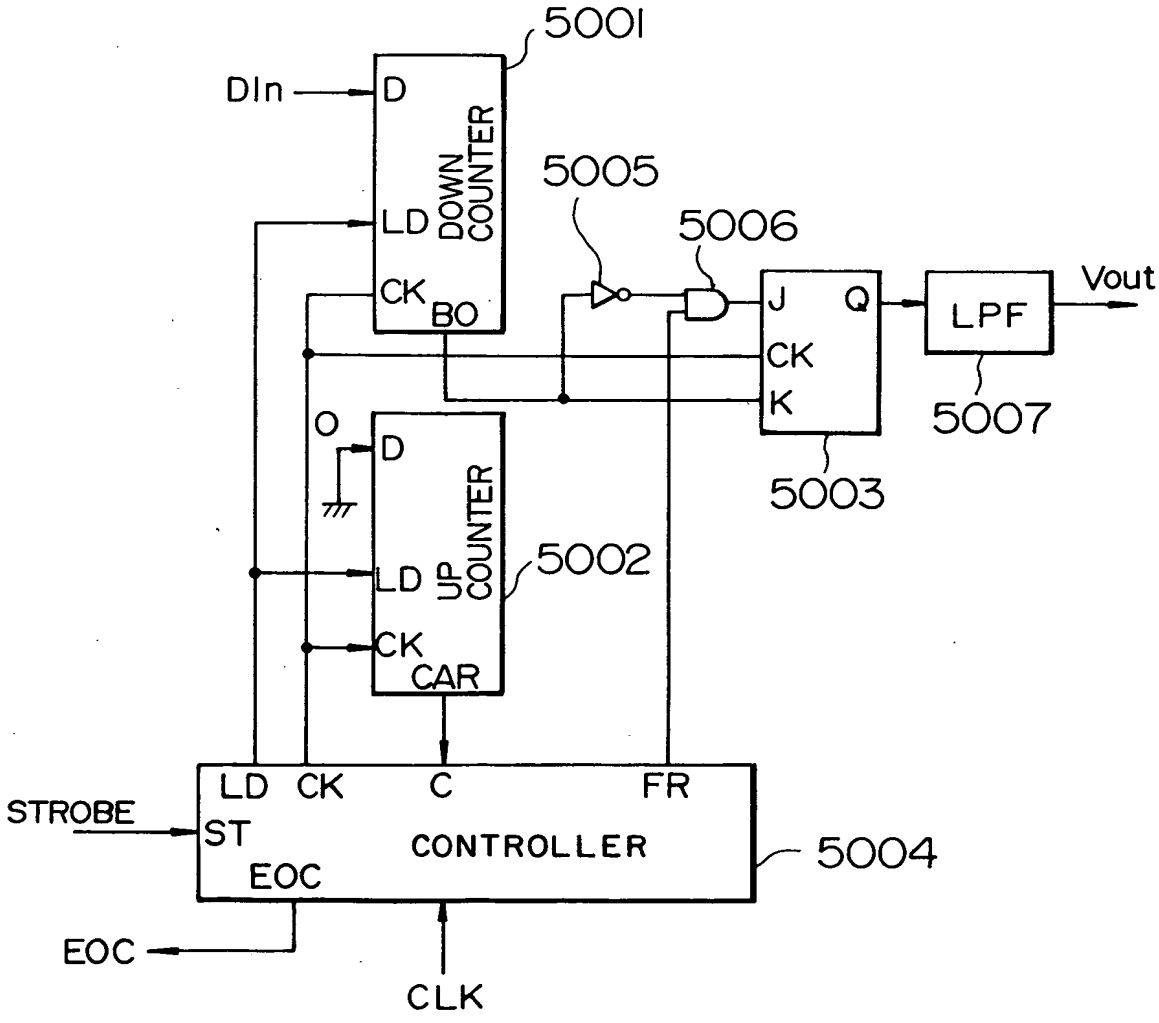
APPROVED BY DRAFTSMAN
CLASS SUBCLASS

FIG. 49



APPROVED BY DRAFTSMAN
CL./SC. SUBCLASS

FIG. 50



APPROVED

FIG. 51

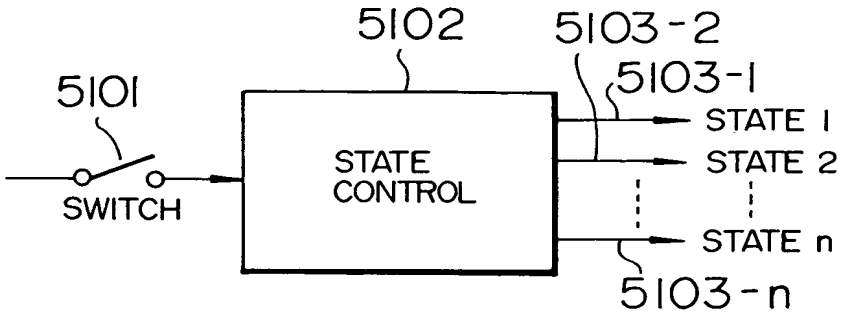



FIG. 52

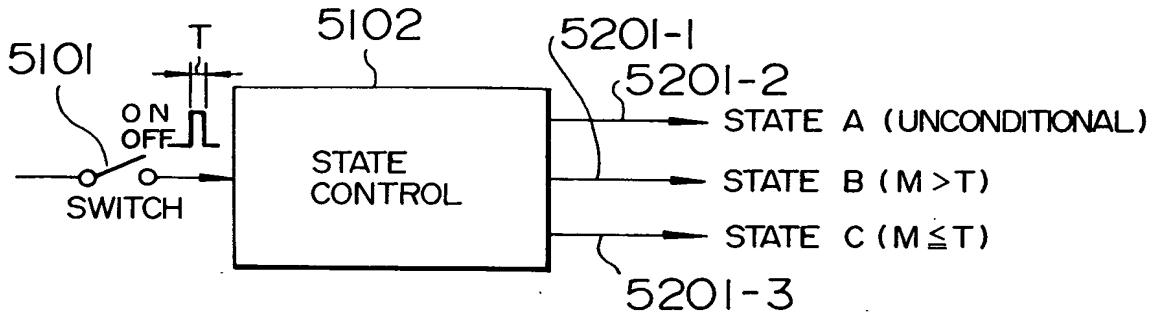



FIG. 53

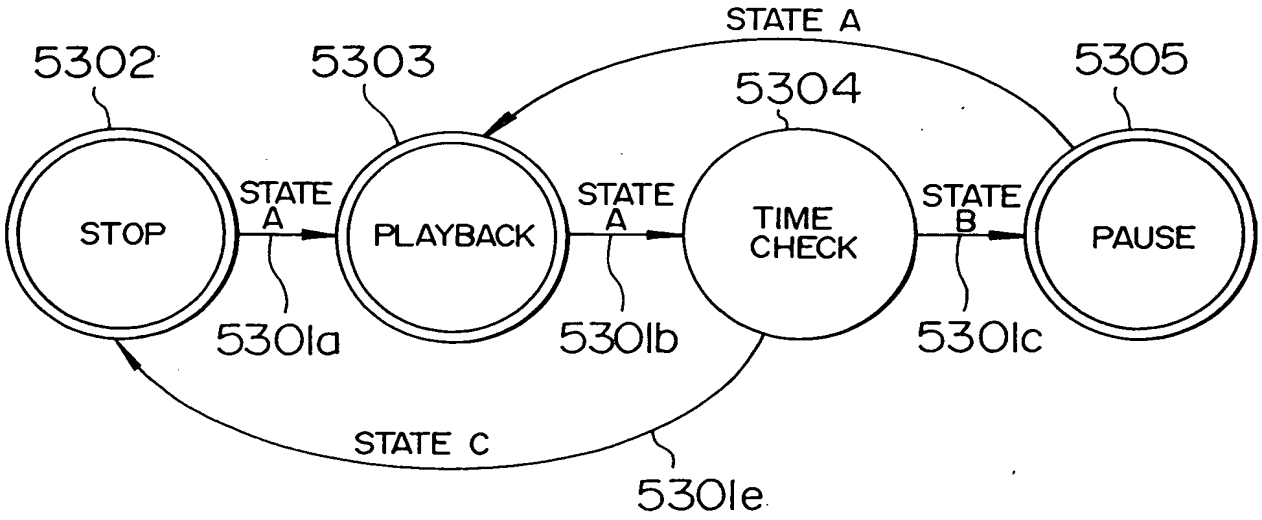


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FIG. 54

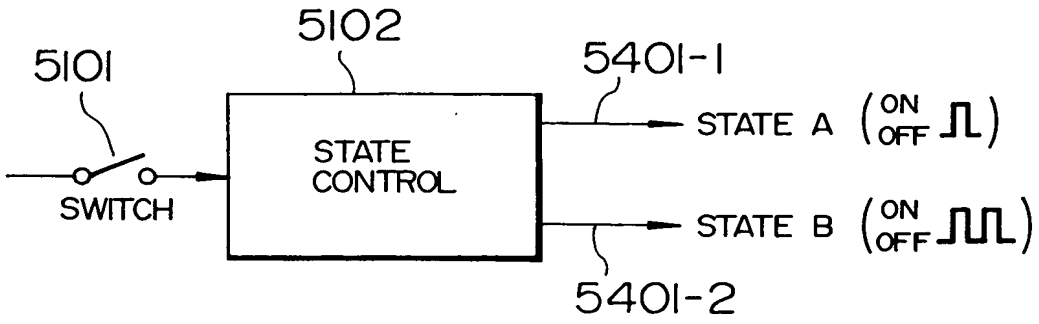


FIG. 55

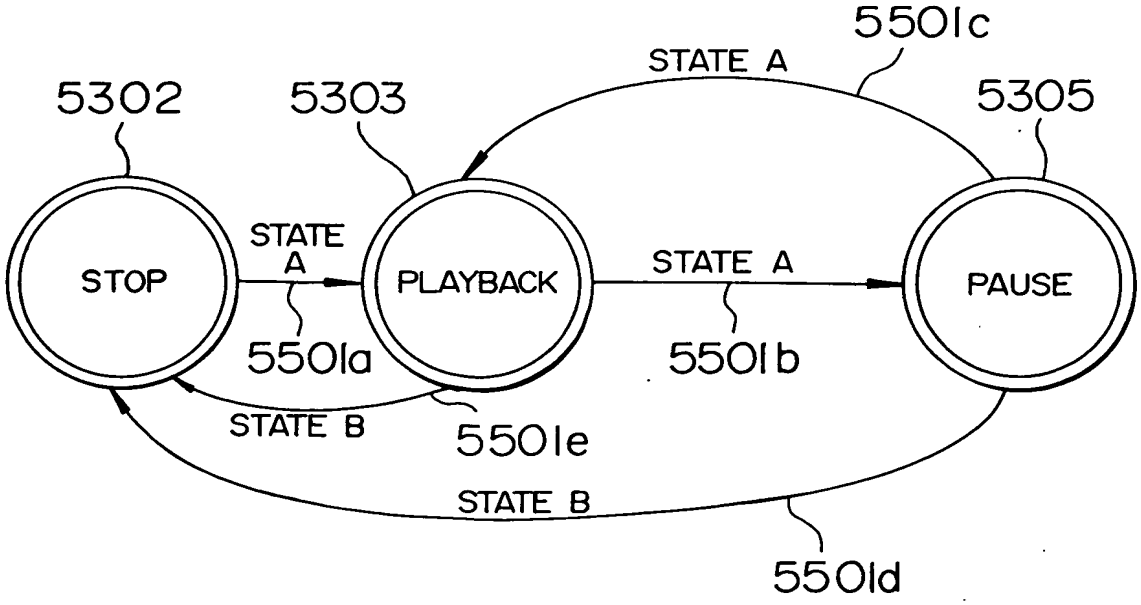

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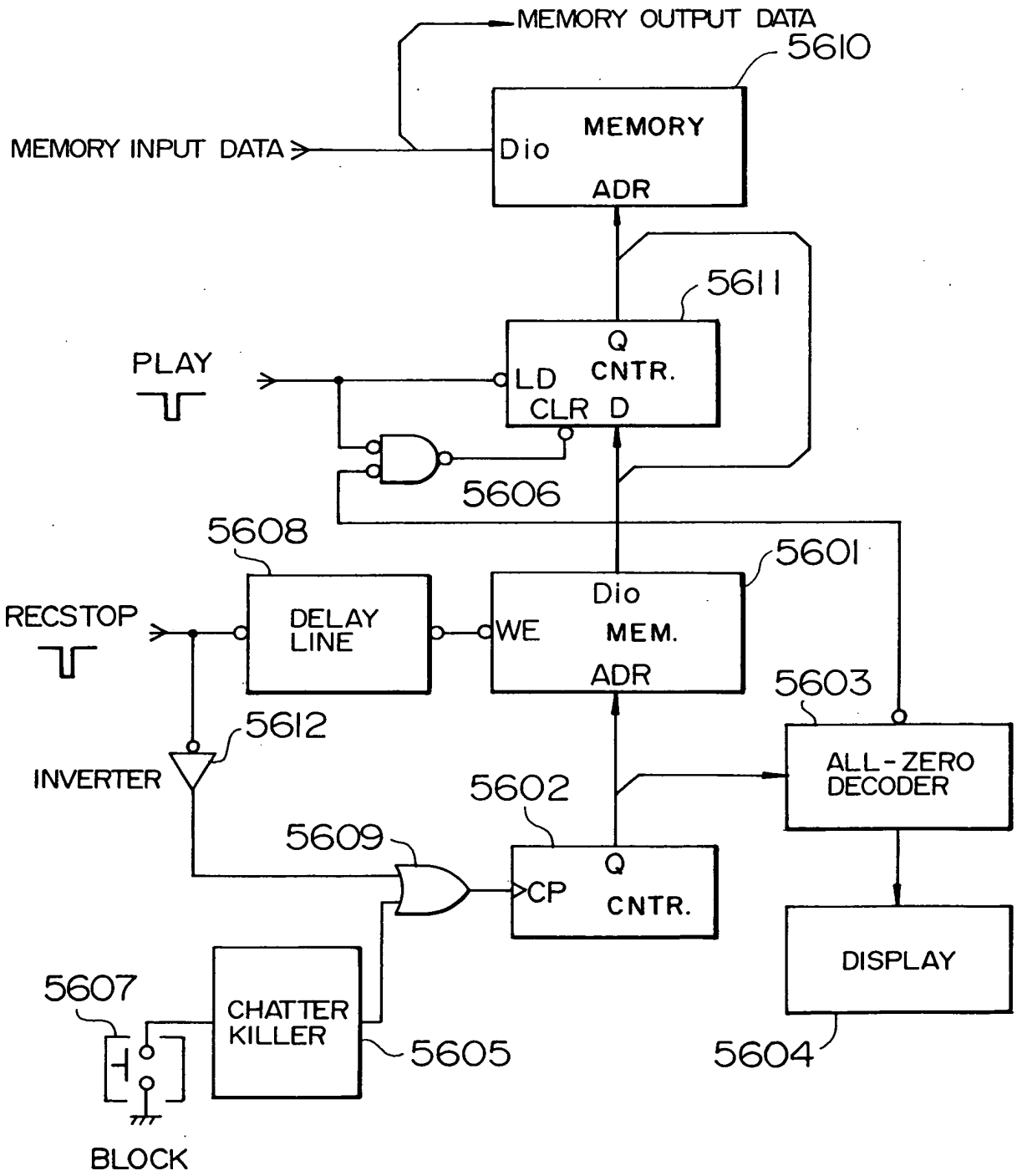
FIG. 56



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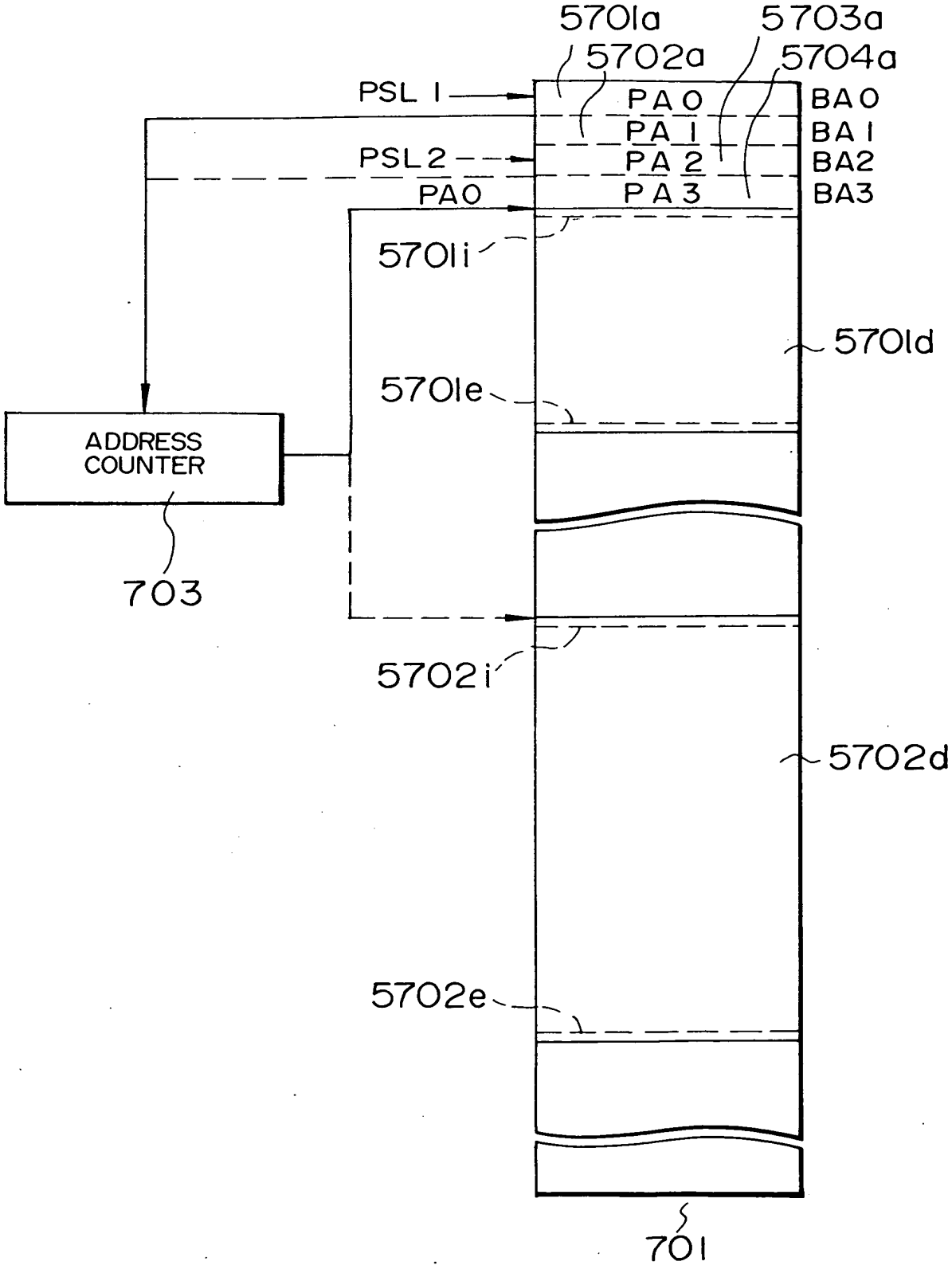
CLASS SUBCLASS

FIG. 57



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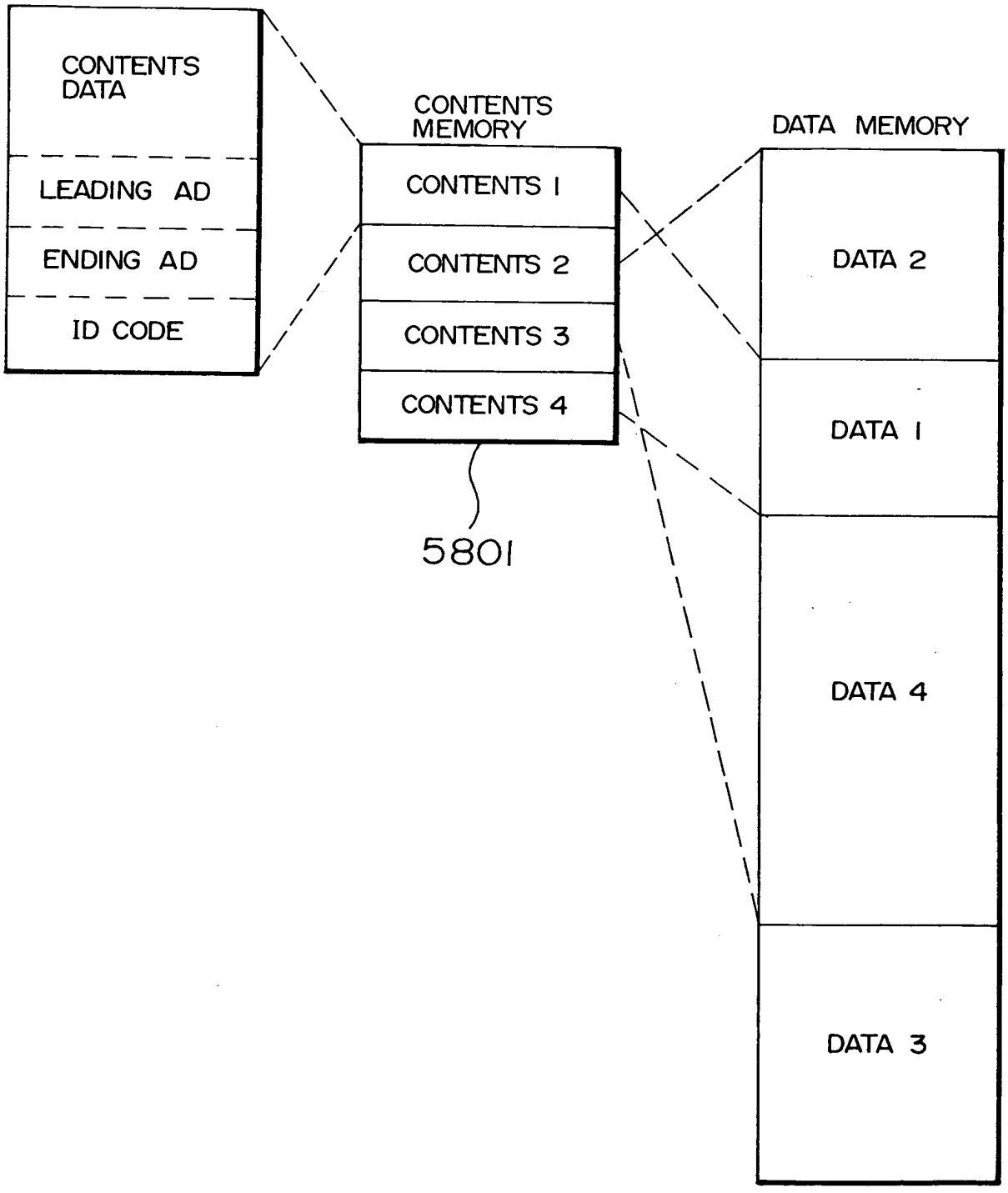
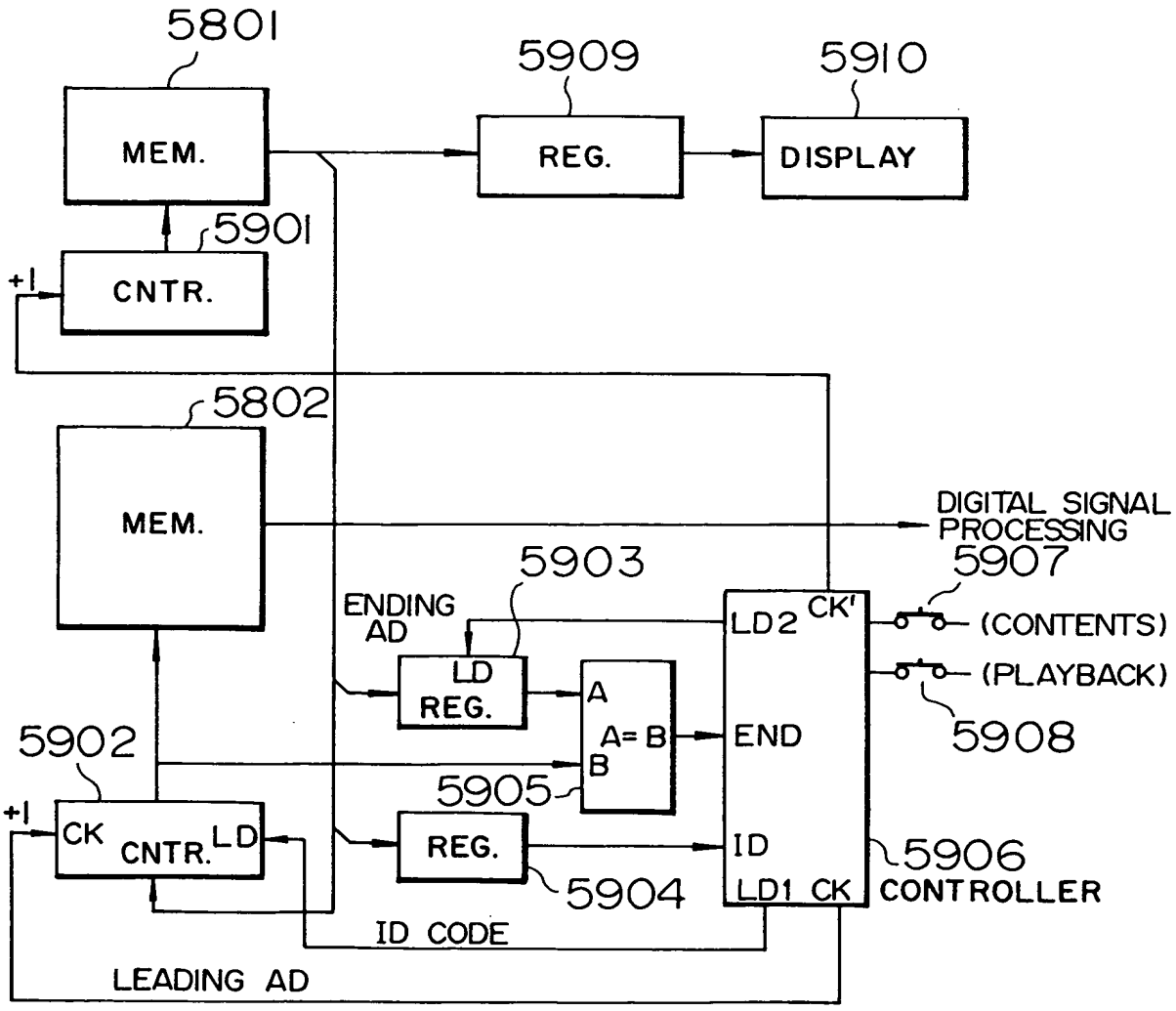
BY
DRAFTSMAN

FIG. 58



APPROVED BY CLASS SUBCLASS DRAWING

FIG. 59



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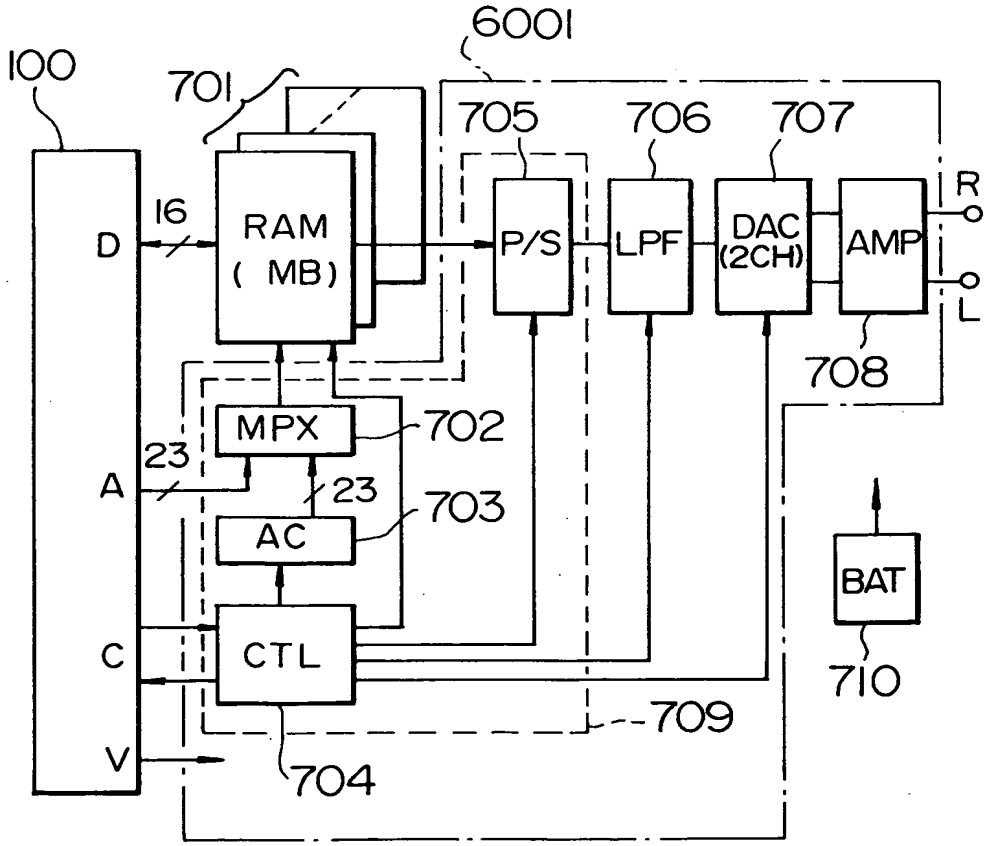
CLASS SUBCLASS

FIG. 60



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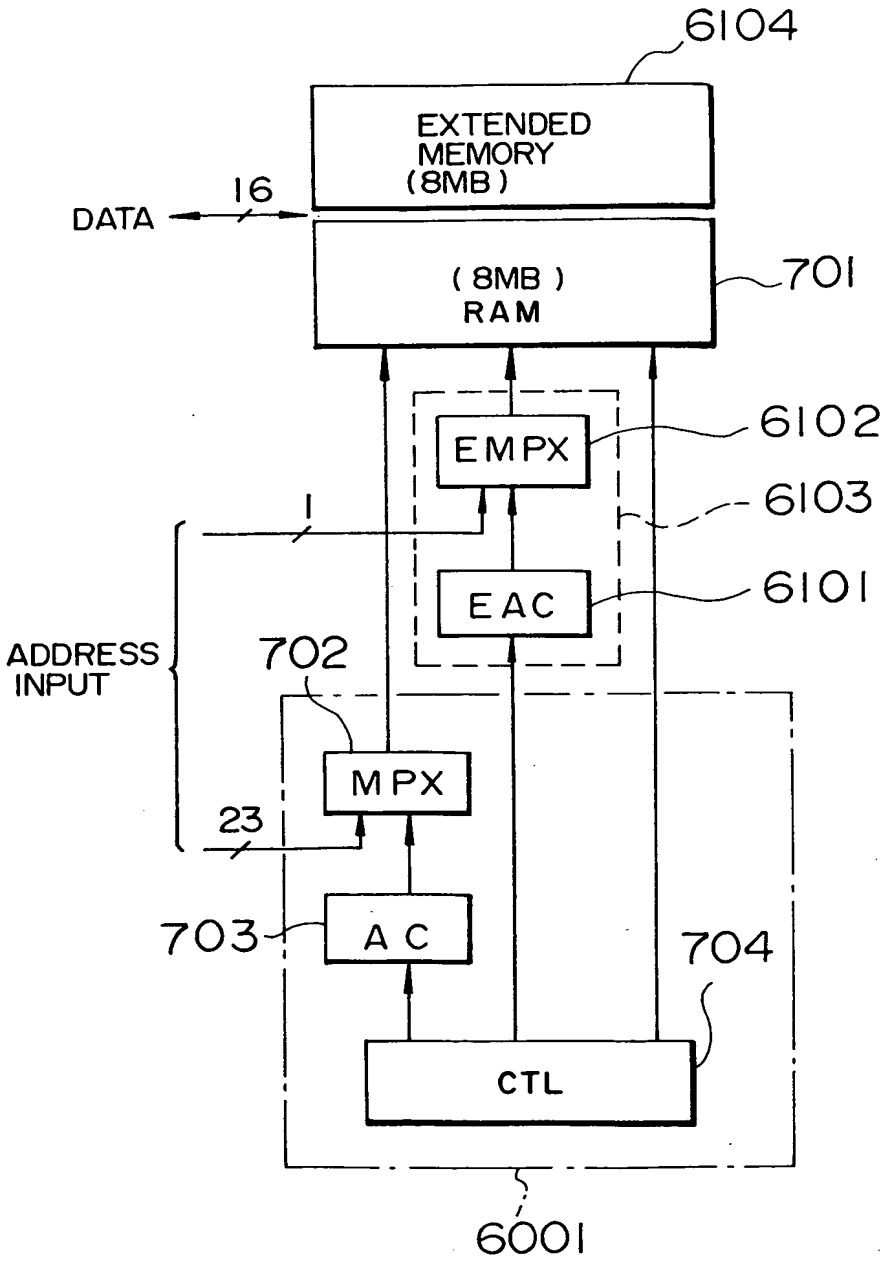
BY CLASS SUBCLASS
DRAFTSMAN

FIG. 61



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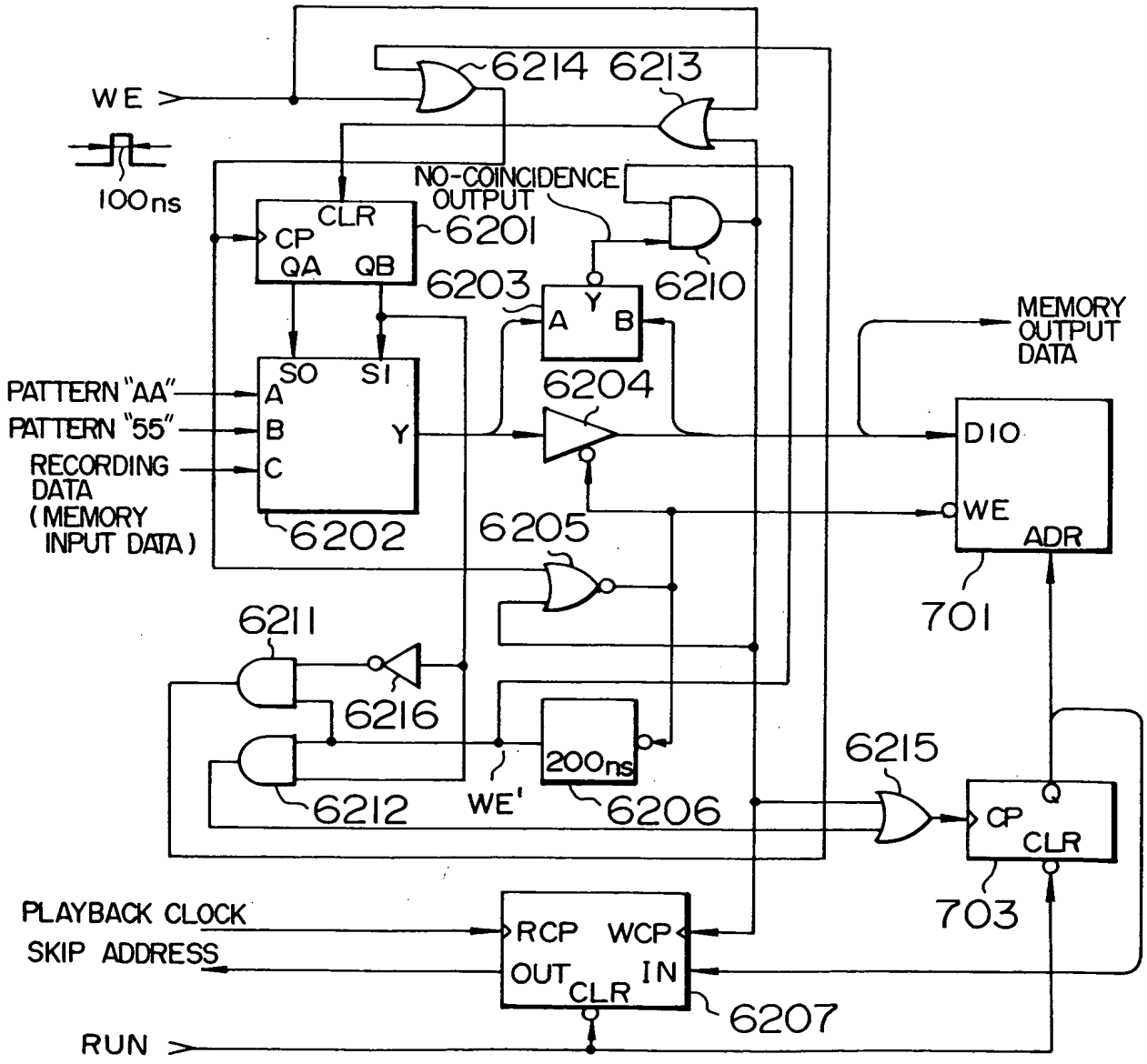
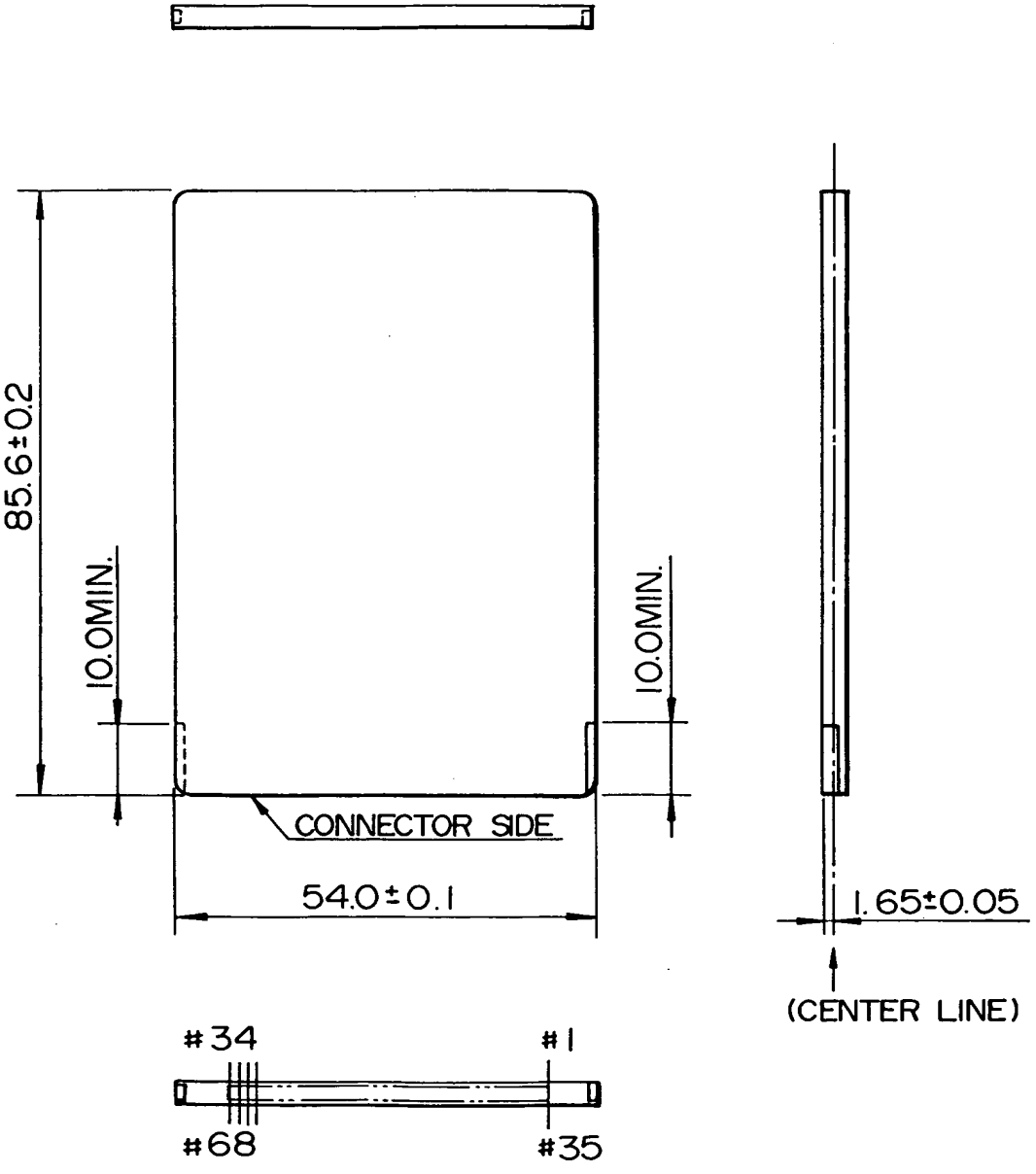
U.S. PVS.
CLASS SUBCLASS

FIG. 62



APPROVED O.G.
BY | CLASS | SUBCLASS
DRAFTSMAN

FIG. 63



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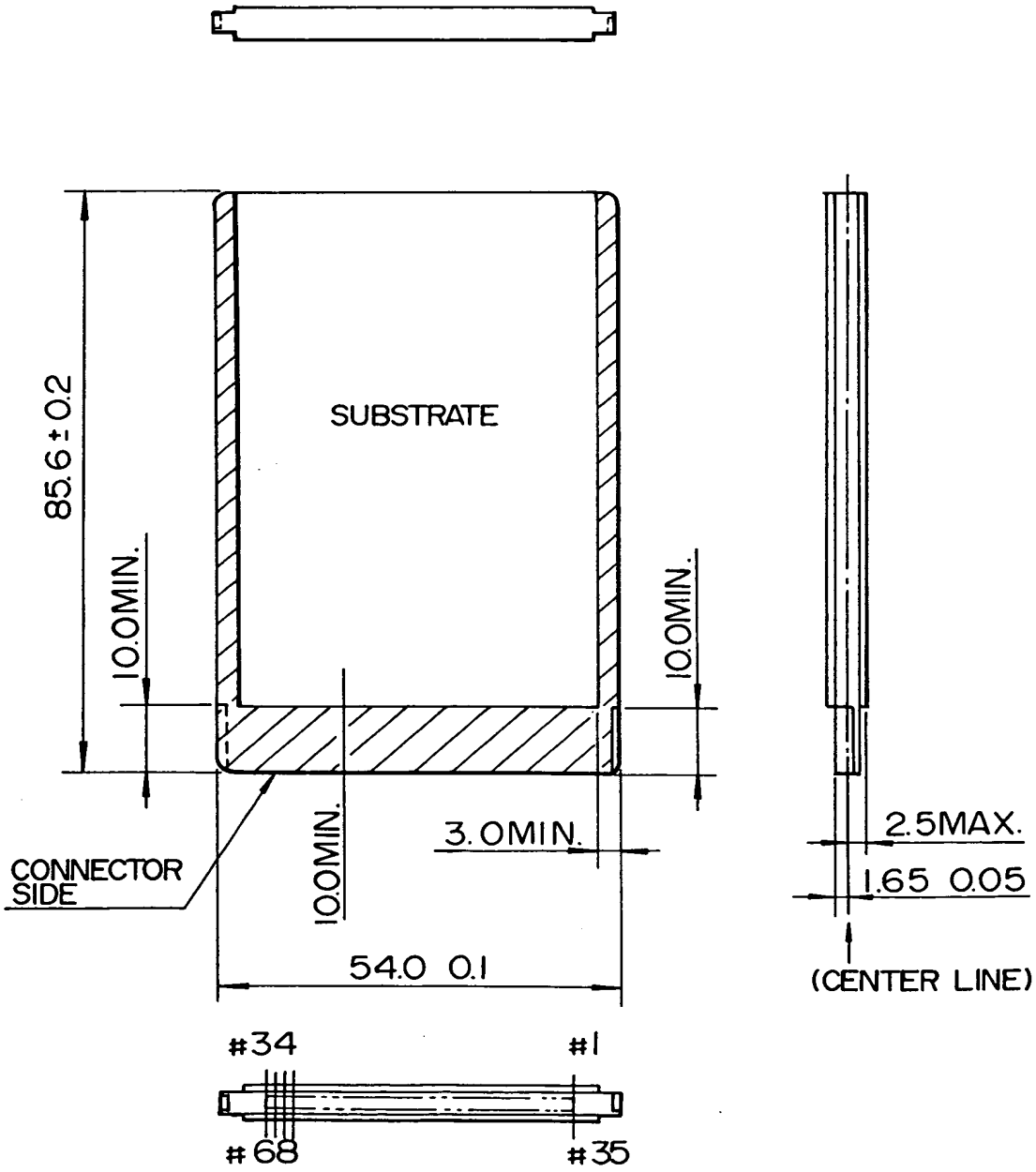
CLASS SUBCLASS

FIG. 64



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# FIG.65

| PIN | NAME | I/O | FUNCTION | PIN | NAME | I/O | FUNCTION |
|---|---|---|---|---|---|---|---|
| 1 | GND | | | 35 | GND | | |
| 2 | D3 | I/O | | 36 | CD1 | O | CARD DETECTION |
| 3 | D4 | I/O | | 37 | D11 | I/O | |
| 4 | D5 | I O | | 38 | D12 | I/O | |
| 5 | D6 | I/O | | 39 | D13 | I/O | |
| 6 | D7 | I/O | | 40 | D14 | I/O | |
| 7 | $\overline{CE1}$ | I | CARD ENABLE | 41 | D15 | I/O | |
| 8 | A10 | I | | 42 | $\overline{CE2}$ | I | CARD ENABLE |
| 9 | $\overline{OE}$ | I | OUTPUT ENABLE | 43 | $\overline{RFSH}$ | I | REFRESH ( FOR PSRAM ) |
| 10 | A11 | I | | 44 | RFU | NC | RESERVE |
| 11 | A 9 | I | | 45 | RFU | NC | RESERVE |
| 12 | A8 | I | | 46 | A17 | I | |
| 13 | A13 | I | | 47 | A18 | I | |
| 14 | A14 | I | | 48 | A19 | I | |
| 15 | $\overline{WE}/\overline{PGM}$ | I | WRITE ENABLE | 49 | A20 | I | |
| 16 | RDY/$\overline{BSY}$ | O | RDY $\overline{BSY}$(EEPROM) | 50 | A21 | I | |
| 17 | VCC | | | 51 | VCC | | |
| 18 | VPP1 | | PROGRAM POWER (EVEN-NUMBERED BYTES) | 52 | VPP2 | | PROGRAM POWER (ODD-NUMBERED BYTES) |
| 19 | A16 | I | | 53 | A22 | I | |
| 20 | A15 | I | | 54 | A23 | I | |
| 21 | A12 | I | | 55 | A24 | I | |
| 22 | A 7 | I | | 56 | A25 | I | |
| 23 | A 6 | I | | 57 | RFU | NC | RESERVE |
| 24 | A 5 | I | | 58 | RFU | NC | RESERVE |
| 25 | A 4 | I | | 59 | RFU | NC | RESERVE |
| 26 | A 3 | I | | 60 | RFU | NC | RESERVE |
| 27 | A 2 | I | | 61 | $\overline{REG}$ | I | ATTRIBUTE MEMORY SELECTION |
| 28 | A 1 | I | | 62 | BVD2 | O | BATTERY VOLTAGE DETECTION |
| 29 | A0 | I | | 63 | BVD1 | O | |
| 30 | D0 | I/O | | 64 | D8 | I/O | |
| 31 | D1 | I/O | | 65 | D9 | I/O | |
| 32 | D2 | I/O | | 66 | D10 | I/O | |
| 33 | WP | O | WRITE PROTECT | 67 | $\overline{CD2}$ | O | CARD DETECTION |
| 34 | GND | | | 68 | GND | | |

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# FIG. 66

| ITEM | SIGNAL | MEMORY CARD | SYSTEM | MEMORY CARD OUTPUT FORMAT |
|---|---|---|---|---|
| CONTROL SIGNAL | $\overline{CE1}$<br>$\overline{CE2}$<br>$\overline{REG}$ | PULL UP TO VCC<br>$R \geqq 10K\Omega$ | ——— | ——— |
| | $\overline{OE}$<br>$\overline{WE}/\overline{PGM}$ | PULL UP TO VCC $R \geqq 10K\Omega$,<br>OR NO RESISTANCE | ——— | ——— |
| | RDY/$\overline{BSY}$ | ——— | PULL UP | NOT DETERMINED |
| | $\overline{RFSH}$ | NC | ——— | ——— |
| ADDRESS | A0-A25 | PULL DOWN TO GND $R \geqq 100K\Omega$,<br>OR NO RESISTANCE | ——— | ——— |
| DATA BUS | D0-D15 | PULL DOWN TO GND $R \geqq 100K\Omega$,<br>OR NO RESISTANCE | ——— | THREE-STATE |
| CARD DETECTION | $\overline{CD1}$<br>$\overline{CD2}$ | CONNECT CARD GND | PULL UP | CONNECT TO GND IN MEMORY CARD |
| WRITE PROTECTION | WP | ——— | ——— | "H" OR "L" |
| BATTERY VOLTAGE DETECTION | BVD1<br>BVD2 | ——— | PULL UP | "H" OR "L" |
| RESERVE PIN | RFU | NC | NC | |

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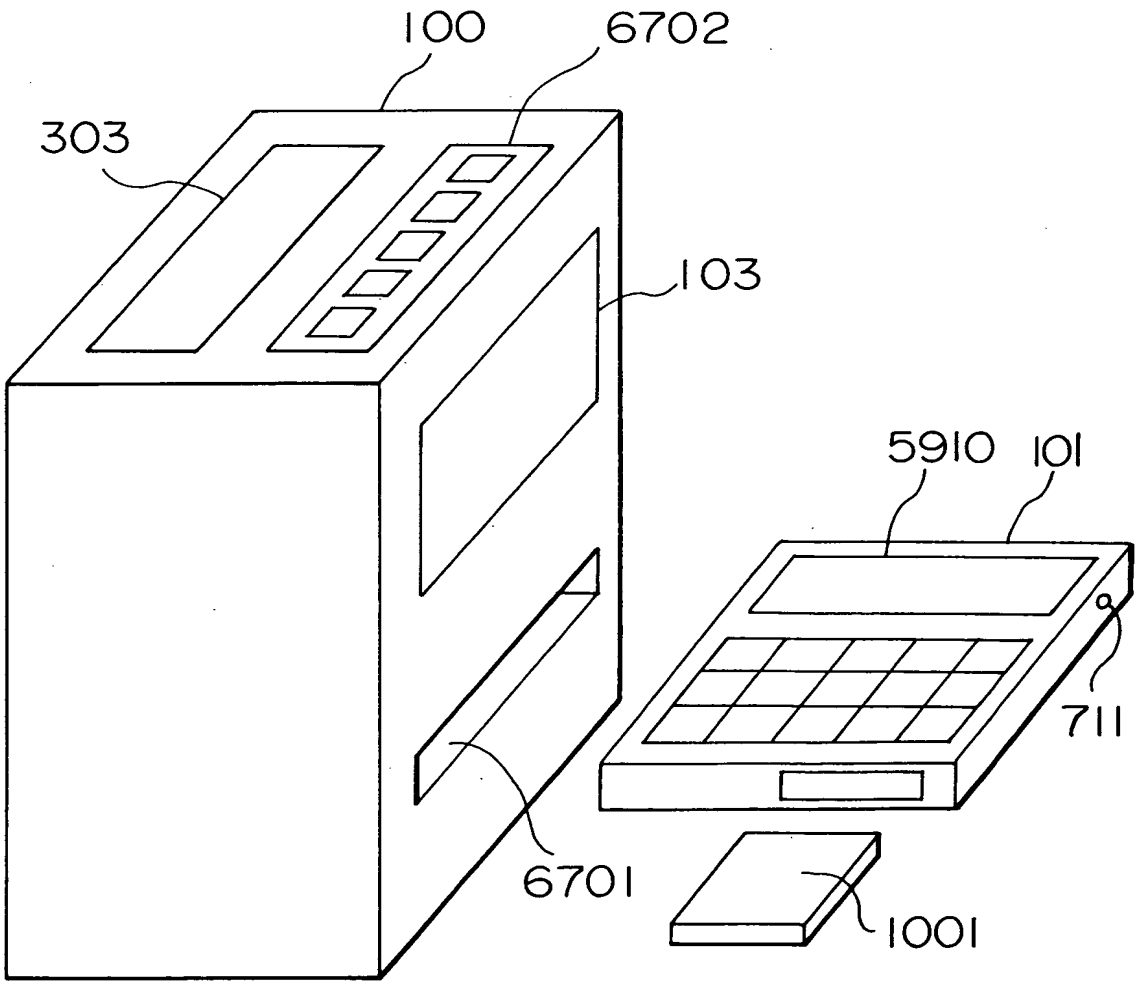
FIG. 67



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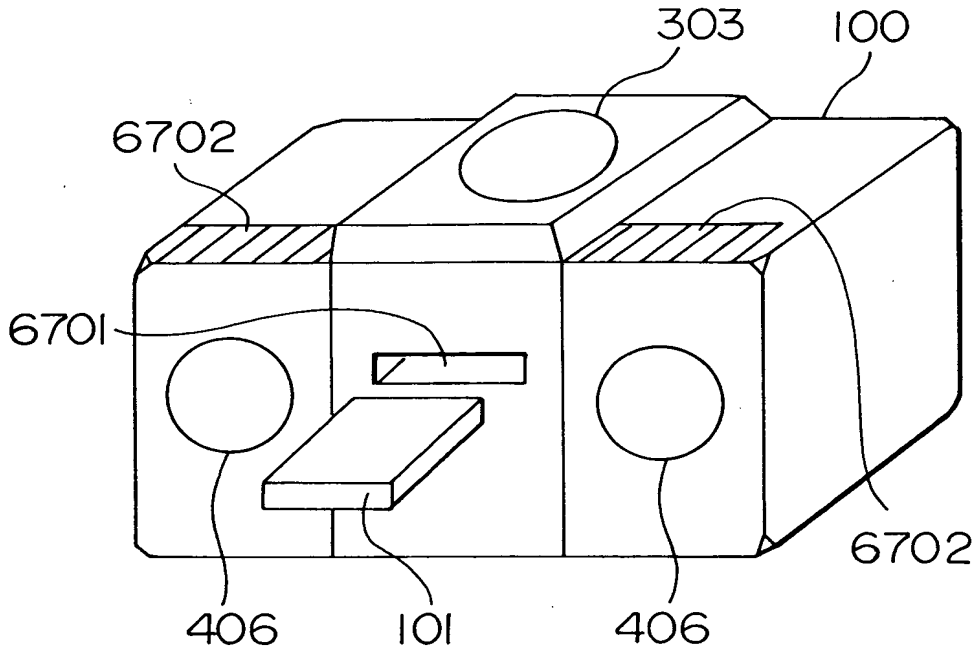
SUBCLASS

FIG. 68



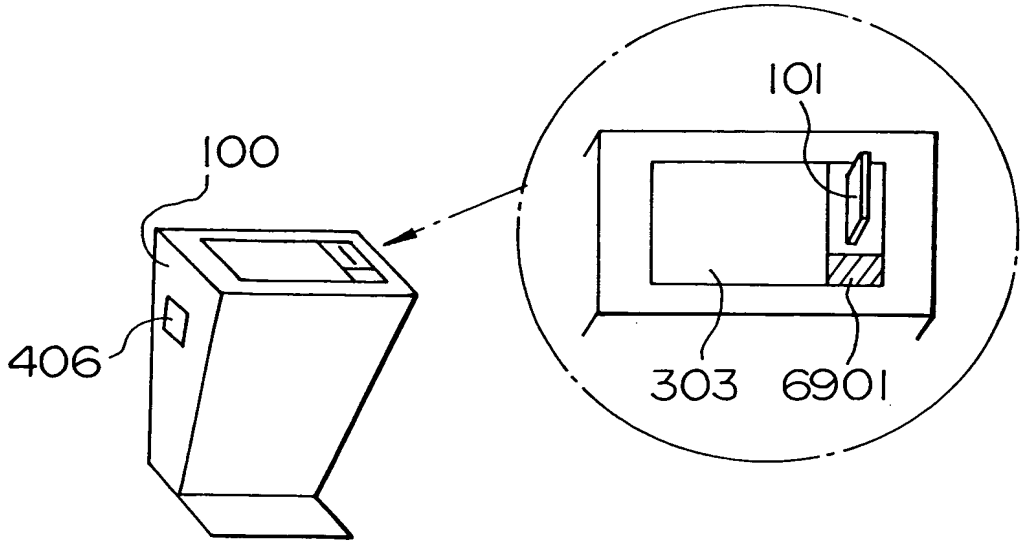


FIG. 69